CALIFORNIA STATEWIDE
LOW INCOME ENERGY EFFICIENCY PROGRAM IMPACT EVALUATION
2008 PARTICIPANT SURVEY

March 12, 2010

VARIABLES FOR SURVEY	Values
Evap	1,0
Furn_Replace	1,0
Furn_Repair	1,0
Weatherization	List of measures installed
Utility	Utility name
Program name	Program name
Meas1	Measure Description
Meas2	Measure Description
Meas3	Measure Description
Meas4	Measure Description
Meas5	Measure Description

Participation and Measure Verification

Intro. Hello, this is <INTERVIEWER NAME> calling from Quantum Market Research on behalf of [UTILITY]. This is not a sales call. May I please speak with [PROGRAM CONTACT]?

I'm calling to do a follow-up survey about your participation in [UTILITY]'s energy-saving program.

[IF PROGRAM CONTACT NOT AVAILABLE]
Who would be the best person to talk to about the information and energy efficiency equipment you received from [UTILITY]?

[IF NEEDED] [UTILITY] would like to better understand how home owners like you think about and manage their energy consumption, and how satisfied you are with your experience with the [PROGRAM]. Your input is very important to [UTILITY].

A1. Just to check, did your household participate in [UTILITY]'s [PROGRAM NAME] in 2008. This is a program where a program representative came to your home and installed some energy savings devices and provided you with some information on how to save energy. Do you recall participating in the program?

1	Yes	**E1**
2	No	Prompt: Is there anyone else at your home that might remember [PROGRAM NAME]?
77	Other [specify]	**T&T**
88	Refused	**T&T**
99	Don't know	**T&T**

Cooling Systems

I want to start by asking you a few questions about the cooling systems that you have in your home.

Ask if Evap=0;
If Evap=1, go to COOL5

COOL1. What type of cooling system do you have in your home? By cooling systems I mean, air conditioners, fans, and evaporative coolers. I have a list of cooling types, and I'd like to know which one your home has. [READ LIST; SELECT ALL THAT APPLY]

1	Central air conditioning with ducts		**COOL3**
2	Room air conditioning		**COOL2**
3	Evaporative cooler		**COOL3**
4	Room ceiling fans		**COOL3**
5	Whole-house fan		**COOL3**
6	Stand-alone fans		**COOL3**
7	None		**COOL3**
88	Refused		**COOL3**
99	Don't Know		**COOL3**

COOL2. How many room air conditioners are in your home?

#	Number of room ACs total		**COOL3**
88	Refused		**COOL3**
99	Don't Know		**COOL3**

COOL3. Since January 1, 2007, have you purchased any new cooling equipment? By cooling equipment, I mean central air conditioning, room air conditioners and evaporative coolers. I do not mean floor or ceiling fans.

1	Yes, central air conditioning		**COOL4**
2	Yes, room air conditioning		**COOL4**
3	Yes, evaporative cooler		**COOL4**
4	Yes, Whole-house fan		**COOL4**
5	No		**HEAT1**
88	Refused		**HEAT1**
99	Don't Know		**HEAT1**

COOL4. Approximately what month and year did you install the new cooling equipment [PROMPT FOR BEST GUESS].

COOL4a. [year]

1	2007	**COOL4b**
2	2008	**COOL4b**
3	2009	**COOL4b**
4	2010	**COOL4b**
88	Refused	**HEAT1**
99	Don't know	**HEAT1**

COOL4b. [month]

1	January	**HEAT1**
2	February	**HEAT1**
3	March	**HEAT1**
4	April	**HEAT1**

5	May	**HEAT1**
6	June	**HEAT1**
7	July	**HEAT1**
8	August	**HEAT1**
9	September	**HEAT1**
10	October	**HEAT1**
11	November	**HEAT1**
12	December	**HEAT1**
88	Refused	**HEAT1**
99	Don't know	**HEAT1**

Ask if Evap=1
If Evap=0, go to HEAT1

COOL5. Our records show you received an evaporative cooler from [UTILITY'S] [PROGRAM NAME] program. Is that correct?

1	Yes	**COOL6**
2	No	**T&T**
88	Refused	**T&T**
99	Don't Know	**T&T**

COOL6. We'd like to ask some questions about the evaporative cooler and how you use the evaporative cooler that was installed through the [UTILITY] program. Is the evaporative cooler still installed?

1	Yes	**COOL8**
2	No	**COOL7**
88	Refused	**COOL8**
99	Don't Know	**COOL8**

COOL7. Why was it removed?

1	Not working	**HEAT1**
2	Other [Record Answer]	**HEAT1**
88	Refused	**HEAT1**
99	Don't Know	**HEAT1**

COOL8. Is the evaporative cooler still working?

1	Yes	**COOL9**
2	No	**HEAT1**
88	Refused	**COOL9**
99	Don't Know	**COOL9**

COOL9. Did the new evaporative cooler replace an old system or is it a new addition to your home?

1	Replaced old system	**COOL10**
2	New addition	**COOL11**
88	Refused	**COOL11**
99	Don't Know	**COOL11**

COOL10. What type was the old cooling system that was removed and replaced with the new evaporative cooler? Was it central air conditioning, individual room air conditioners, or an evaporative cooler?

1	Central air conditioning	**COOL11**
2	Individual room air conditioners	**COOL11**
3	Evaporative cooler	**COOL11**
77	Other [specify]	**COOL11**
88	Refused	**COOL11**

99	Don't Know	**COOL11**

COOL11. Is this evaporative cooler the only cooling system in your home, or are there other cooling units?

1	Other units	**COOL12**
2	No other units	**COOL13**
88	Refused	**COOL13**
99	Don't Know	**COOL13**

COOL12. Which of the following cooling units in addition to the evaporative cooler mentioned above are operating in your home at this time? [READ LIST]

1	Central air conditioning with ducts		**COOL13**
2	Room air conditioning		**COOL12A**
4	Whole-house fan		**COOL13**
5	Room ceiling fans		**COOL13**
6	Stand-alone fans		**COOL13**
7	None		**COOL13**
88	Refused		**COOL13**
99	Don't Know		**COOL13**

COOL12A. How many room air conditioning units are in your home? [READ LIST]

#	Number of room ACs total		**COOL3**
88	Refused		**COOL3**
99	Don't Know		**COOL3**

COOL13. Were you aware of evaporative coolers before participating in the [PROGRAM NAME] program?

1	Yes	**COOL14**
2	No	**COOL16**
88	Refused	**COOL14**
99	Don't Know	**COOL14**

COOL14. How likely do you think you would have been to buy an evaporative cooler if you didn't get one from the [UTILITY] program? Would you say extremely likely, very likely, somewhat likely, not very likely or not at all likely?

1	Extremely Likely	**COOL15**
2	Very likely	**COOL15**
3	Somewhat likely	**COOL15**
4	Not very likely	**COOL16**
5	Not at all likely	**COOL16**
88	Refused	**COOL16**
99	Don't Know	**COOL16**

COOL15. If the [PROGRAM] was not available, when would you have bought the evaporative cooler:

1	At the same time	**COOL16**
2	Within a year	**COOL16**
3	More than a year	**COOL16**
88	Refused	**COOL16**
99	Don't know	**COOL16**

Ask if COOL12 =1 or 2
If COOL12 = 4,5,6,7,88, or 99, go to COOL21

Now I have some questions about how much you use new evaporative cooler with the other air conditioning systems in your house.

COOL16. Since the evaporative cooler was installed through the [PROGRAM], to what extent has your use of your other air conditioner changed? Would you say you [READ LIST]

1	Do not use AC at all anymore	**COOL17**
2	Use AC a lot less than I used to	**COOL17**
3	Use AC somewhat less than I used to	**COOL17**
4	Use AC about the same as I used to	**COOL17**
5	Use AC more than I used to	**COOL17**
88	Refused	**COOL17**
99	Don't Know	**COOL17**

COOL17 Before you received the new evaporative cooler, how did you control your air conditioning system [CHOOSE ONE]?

1	Set at one temperature and leave it	**COOL18**
2	Manually adjust temperature as needed	**COOL19**
3	Adjust temperature by programmable thermostat	**COOL19**
4	Other [specify]	**COOL19**
88	Refused	**COOL19**
99	Don't Know	**COOL19**

COOL18. At what temperature did you usually set the thermostat?

#	Temperature	**COOL19**
88	Refused	**COOL19**
99	Don't Know	**COOL19**

COOL19. How often do you run the evaporative cooler and the air conditioning at the same time? Never, sometimes, or always?

1	Never	**COOL20**
2	Sometimes	**COOL20**
3	Always	**COOL20**
88	Refused	**COOL20**
99	Don't Know	**COOL20**

COOL20. How often do you run the air conditioning with the evaporative cooler off? Never, sometimes, or always?

1	Never	**COOL21**
2	Sometimes	**COOL21**
3	Always	**COOL21**
88	Refused	**COOL21**
99	Don't Know	**COOL21**

COOL21. How many days a year did you use your evaporative cooler?

1	Not at all	**HEAT1**
2	10 days or less	**COOL22**
3	11-30 days	**COOL22**
4	31-60days	**COOL22**
5	61-90 days	**COOL22**
6	More than 90 days	**COOL22**
88	Refused	**COOL22**
99	Don't Know	**COOL22**

COOL22. What times of the day did you use your evaporative cooler [CHOOSE AS MANY AS APPLY]?

1	Morning	**COOL23**
2	Afternoon	**COOL23**
3	Evening	**COOL23**
4	Night	**COOL23**
5	All day	**COOL23**
88	Refused	**COOL23**
99	Don't Know	**COOL23**

COOL23. How did you use your evaporative cooler on the hottest day of the year [CHOOSE ONE]?

1	Less than usual	**COOL24**
2	About the same	**COOL24**
3	More than usual	**COOL24**
88	Refused	**COOL24**
99	Don't Know	**COOL24**

COOL24. How often do you keep any windows open when the evaporative cooler is running? Never, sometimes, or always?

1	Never	**HEAT1**
2	Sometimes	**HEAT1**
3	Always	**HEAT1**
88	Refused	**HEAT1**
99	Don't Know	**HEAT1**

Heating Systems

I now have some questions about the heating systems that you have in your home.

Ask if Furn_Replace=0 and Furn_Repair=0;
If Furn_Replace=1 go to HEAT4;
If Furn_Repair=1, go to HEAT16

HEAT1. Which of the following best describes your **primary heating system**? [READ]

1	Gas furnace	**HEAT2**
2	Electric forced air furnace	**HEAT2**
3	Electric Heat Pump	**HEAT2**
4	Electric Space Heater	**HEAT2**
5	None	**W1**
77	Other [specify]	**HEAT2**
88	Refused	**HEAT2**
99	Don't Know	**HEAT2**

HEAT2. Since January 1, 2007, have you purchased a new heater for your home? By heating appliances I mean a gas furnace, an electric forced air furnace, an electric heat pump, or electric space heater.

1	Yes, gas furnace		**HEAT3**
2	Yes, electric forced air furnace		**HEAT3**
3	Yes, electric heat pump		**HEAT3**
4	Yes, electric space heater		**HEAT3**
5	No		**HEAT3**
88	Refused		**W1**
99	Don't Know		**W1**

HEAT3. Approximately what month and year was your new heater installed? [PROMPT FOR BEST GUESS].

HEAT3a. [year]

1	2007	**HEAT3b**
2	2008	**HEAT3b**
3	2009	**HEAT3b**
4	2010	**W1**
88	Refused	**W1**
99	Don't know	**W1**

HEAT3b. [month]

1	January	**W1**
2	February	**W1**
3	March	**W1**
4	April	**W1**
5	May	**W1**
6	June	**W1**
7	July	**W1**
8	August	**W1**
9	September	**W1**
10	October	**W1**
11	November	**W1**
12	December	**W1**
88	Refused	**W1**
99	Don't know	**W1**

Ask if Furn_Replace=1

HEAT4. We'd like to ask some questions about the furnace that you had installed through the [PROGRAM]. Our records show the [UTILITY] [PROGRAM NAME] installed a new furnace. Is that correct?

1	Yes	**HEAT5**
2	No	**T&T**
88	Refused	**T&T**
99	Don't Know	**T&T**

HEAT5. Is the furnace still installed?

1	Yes	**HEAT7**
2	No	**HEAT6**
88	Refused	**HEAT7**
99	Don't Know	**HEAT7**

HEAT6. Why was it removed?

1	Not working	**W1**
2	Other [record answer]	**W1**
88	Refused	**W1**
99	Don't Know	**W1**

HEAT7. Is the furnace still working?

1	Yes	**HEAT8**
2	No	**W1**
88	Refused	**HEAT8**
99	Don't Know	**HEAT8**

HEAT8. What was your main source of heating before the new furnace was installed through the [PROGRAM] Was it [READ]…? [SELECT ALL THAT APPLY]

1	Gas Furnace	**HEAT9**
2	Electric forced air furnace	**HEAT9**
3	Electric Heat Pump	**HEAT9**
4	Electric Space Heater	**HEAT9**
77	Other [specify]	**HEAT9**
88	Refused	**HEAT9**
99	Don't Know	**HEAT9**

HEAT9. Did the new furnace replace an old system or is it a new addition to your home?

1	Replaced old system	**HEAT10**
2	New additional system	**HEAT12**
88	Refused	**HEAT12**
99	Don't Know	**HEAT12**

HEAT10. Was your old heating system working prior to being replaced?

1	Yes	**HEAT11**
2	No	**HEAT11**
88	Refused	**HEAT11**
99	Don't Know	**HEAT11**

HEAT11. What type of heating system did the new furnace replace? Was it [READ]…?

1	Gas Furnace	**HEAT12**
2	Electric forced air furnace	**HEAT12**
3	Electric Heat Pump	**HEAT12**
4	Electric Space Heater	**HEAT12**
77	Other [specify]	**HEAT12**
88	Refused	**HEAT12**
99	Don't Know	**HEAT12**

HEAT12. If the program didn't exist, how likely were you to buy a new furnace if you didn't get one from the [PROGRAM NAME] program? Would you say extremely likely, very likely, somewhat likely, not very likely or not at all likely?

1	Extremely Likely	**HEAT13**
2	Very likely	**HEAT13**
3	Somewhat likely	**HEAT13**
4	Not very likely	**HEAT14**
5	Not at all likely	**HEAT14**
88	Refused	**HEAT14**
99	Don't Know	**HEAT14**

HEAT13. If the [PROGRAM] was not available, when would you have bought the new furnace:

1	At the same time	**HEAT14**
2	Within a year	**HEAT14**
3	More than a year	**HEAT14**
88	Refused	**HEAT14**
99	Don't know	**HEAT14**

Now I have some questions about how much you use the heating systems in your house.

HEAT14. Since the new furnace was installed through the [PROGRAM], to what extent has your use of your heating systems changed? Would you say you used your previous heating system more, less, or about the same number of days as the new furnace?

1	Used the previous system more	**HEAT15**
2	Used the previous system less	**HEAT15**
3	Used the previous system about the same	**HEAT15**
88	Refused	**HEAT15**
99	Don't Know	**HEAT15**

HEAT15. During the year before you had the new furnace installed, how did you control your heating system [CHOOSE ONE]?

1	Set at one temperature and leave it	**HEAT24**
2	Manually adjust temperature as needed	**HEAT25**
3	Adjust temperature by programmable thermostat	**HEAT25**
4	Other [specify]	**HEAT25**
88	Refused	**HEAT25**
99	Don't Know	**HEAT25**

Ask if Furn_Repair=1;

HEAT16. Our records show you had repairs done on your furnace through the [NAME OF PROGRAM]. Is that correct?

	Yes	**HEAT17**
	No	**T&T**
	Refused	**T&T**
	Don't Know	**T&T**

HEAT17. We'd like to ask some questions about the furnace that you had repaired through the [NAME OF PROGRAM]. Is the furnace still installed?

1	Yes	**HEAT19**
2	No	**HEAT18**
88	Refused	**HEAT19**
99	Don't Know	**HEAT19**

HEAT18. Why was it removed?

1	Record answer	**W1**
88	Refused	**W1**
99	Don't Know	**W1**

HEAT19. Is the furnace still working?

1	Yes	**HEAT20**
2	No	**W1**
88	Refused	**HEAT20**
99	Don't Know	**HEAT20**

HEAT20. We are trying to understand why households like yours conduct furnace repairs. How likely were you to repair your furnace if you didn't use the [UTILITY] program? Would you say extremely likely, very likely, somewhat likely, not very likely or not at all likely?

1	Extremely Likely	**HEAT21**
2	Very likely	**HEAT21**
3	Somewhat likely	**HEAT21**
4	Not very likely	**HEAT22**

5	Not at all likely	**HEAT22**
88	Refused	**HEAT22**
99	Don't Know	**HEAT22**

HEAT21. If the [PROGRAM] was not available, when would you have repaired your furnace:

1	At the same time	**HEAT22**
2	Within a year	**HEAT22**
3	More than a year	**HEAT22**
88	Refused	**HEAT22**
99	Don't know	**HEAT22**

Now I have some questions about how much you use the heating systems in your house.

HEAT22. Since the new furnace was repaired through the [PROGRAM], to what extent has your use of your furnace changed? Would you say you used your furnace more, less, or about the same number of days as the you did after it was repaired?

1	Used the furnace more before it was repaired	**HEAT23**
2	Used the furnace less before it was repaired	**HEAT23**
3	Used the furnace about the same before it was repaired	**HEAT23**
88	Refused	**HEAT23**
99	Don't Know	**HEAT23**

HEAT23. During the year before you had your furnace repaired through the [PROGRAM], how did you control your heating system [CHOOSE ONE]?

1	Set at one temperature and leave it	**HEAT24**
2	Manually adjust temperature as needed	**HEAT25**
3	Adjust temperature by programmable thermostat	**HEAT25**
4	Other [specify]	**HEAT25**
88	Refused	**HEAT25**
99	Don't Know	**HEAT25**

HEAT24. At what temperature did you usually set the thermostat for the heater?

#	Temperature	**HEAT25**
88	Refused	**HEAT25**
99	Don't Know	**HEAT25**

Ask if Furn_Replace=1 or Furn_Repair=1

HEAT25. Since you had your furnace upgraded through the [PROGRAM], about how many days a year did you use your furnace? [READ LIST]

1	Not at all	**W1**
2	10 days or less	**HEAT26**
3	11-30 days	**HEAT26**
4	31-60days	**HEAT26**
5	61-90 days	**HEAT26**
6	More than 90 days	**HEAT26**
88	Refused	**HEAT26**
99	Don't Know	**HEAT26**

HEAT26. What times of the day did you use your furnace [CHOOSE AS MANY AS APPLY]?

1	Morning	**W1**
2	Afternoon	**W1**
3	Evening	**W1**

4	Night	**W1**
5	All day	**W1**
88	Refused	**W1**
99	Don't Know	**W1**

Weatherization

Ask if Weatherization List includes measures

INCLUDE SPECIFIC MEASURE DESCRIPTION TO AUTOMATICALLY LOAD INTO QUESTION TEXT

W1. Our records show you [WEATHERIZATION LIST]. Is that correct?

1	Yes	**W2**
2	No	**OTH1**
88	Refused	**OTH1**
99	Don't Know	**OTH1**

W2. Is the [TYPE OF MEASURE] still installed?

1	Yes	**W4**
2	No [RECORD WHICH ONES REMOVED]	**W3**
88	Refused	**W4**
99	Don't Know	**W4**

W3. Why was it removed?

1	[Record answer]	**W4**
88	Refused	**W4**
99	Don't Know	**W4**

W4. If the program didn't exist, how likely would you have been to weatherize your home? Would you say extremely likely, very likely, somewhat likely, not very likely or not at all likely?

1	Extremely Likely	**W5**
2	Very likely	**W5**
3	Somewhat likely	**W5**
4	Not very likely	**OTH1**
5	Not at all likely	**OTH1**
88	Refused	**OTH1**
99	Don't Know	**OTH1**

W5. If the [PROGRAM] was not available, when would you have bought and installed the weatherization measures?:

1	At the same time	**OTH1**
2	Within a year	**OTH1**
3	More than a year	**OTH1**
88	Refused	**OTH1**
99	Don't know	**OTH1**

Other Measures

Ask All

OTH1. Our records show that you also had additional energy efficiency measures installed in your home though the [UTILITY][PROGRAM], including:

[MEAS1, MEAS2, MEAS3, MEAS4…] Is this correct?

	Yes	**OTH2**
	No	**APP1**
	Refused	**APP1**
	Don't Know	**APP1**

OTH2. Are these energy efficiency improvements still installed?

1	Yes	**OTH4**
2	No [RECORD WHICH MEASURE WERE REMOVED]	**OTH3**
88	Refused	**OTH4**
99	Don't Know	**OTH4**

OTH3. Why were they removed?

1	Record answer FOR EACH MEASURE	**OTH4**
88	Refused	**OTH4**
99	Don't Know	**OTH4**

OTH4. How likely were you to install these other energy efficiency measures if you didn't use the [UTILITY] program? Would you say extremely likely, very likely, somewhat likely, not very likely or not at all likely?

1	Extremely Likely	**OTH5**
2	Very likely	**OTH5**
3	Somewhat likely	**OTH5**
4	Not very likely	**OTH6**
5	Not at all likely	**OTH6**
88	Refused	**OTH6**
99	Don't Know	**OTH6**

OTH5. If the [PROGRAM] was not available, when would you have installed these other measures?:

1	At the same time	**OTH6**
2	Within a year	**OTH6**
3	More than a year	**OTH6**
88	Refused	**OTH6**
99	Don't know	**OTH6**

OTH7. Since participating in the [PROGRAM], did you do anything more to your home to try to save energy?

1	No	**OTH9**
2	Yes	**OTH8**
88	Refused	**OTH9**
99	Don't know	**OTH9**

OTH8. What else did you do to your home?

1	RECORD ANSWER	**OTH9**
88	Refused	**OTH9**
99	Don't know	**OTH9**

OTH9. Since participating in the [PROGRAM], is there anything that you do differently in order to save energy?

1	No	**APP1**
2	Yes	**OTH10**
88	Refused	**APP1**
99	Don't know	**APP1**

OTH10. What do you do differently?

1	RECORD ANSWER	**APP1**
88	Refused	**APP1**
99	Don't know	**APP1**

Appliance Characteristics

Now I am going to ask you some questions about other appliances that would affect your energy consumption.

ASK ALL

APP1. What kind of water heater do you have? [READ LIST]

1	Gas Water Heater		**APP11**
2	Electric Water Heater		**APP11**
3	Solar		**APP11**
4	Other		**APP11**
88	Refused		**APP11**
99	Don't Know		**APP11**

APP11. I'm going to read a list of appliances, please tell me if you have purchased any of these since January 1, 2007. Have you purchase [READ LIST]:

	Clothes Washer	Yes/No	**APP12**
	Clothes Dryer	Yes/No	**APP12**
	Refrigerator	Yes/No	**APP12**
	Dishwasher	Yes/No	**APP12**
	Water Heater	Yes/No	**APP12**
	Made no purchases		**APP13**
	Refused		**APP13**
	Don't Know		**APP13**

APP12. Approximately what month and year did you purchase the new appliances [RECORD FOR EACH YES ANSWER IN PREVIOUS QUESTION].

APP12a. [year]

1	2007	**APP12b**
2	2008	**APP12b**
3	2009	**APP12b**
4	2010	**APP12b**
88	Refused	**APP13**
99	Don't know	**APP13**

APP12b. [month]

1	January	**APP13**
2	February	**APP13**
3	March	**APP13**

4	April	**APP13**
5	May	**APP13**
6	June	**APP13**
7	July	**APP13**
8	August	**APP13**
9	September	**APP13**
10	October	**APP13**
11	November	**APP13**
12	December	**APP13**
88	Refused	**APP13**
99	Don't know	**APP13**

APP13. Have you switched the use of any electrical appliances to equipment that uses gas or another fuel? I'm going to read a list of appliances, please tell me if you changed from electricity to a different fuel since January 1, 2007. [READ LIST]:

	Water heater	Yes/No	**HOUS1**
	Pool/spa heater	Yes/No	**HOUS1**
	Stove	Yes/No	**HOUS1**
	Oven	Yes/No	**HOUS1**
	Dryer	Yes/No	**HOUS1**
	Grill	Yes/No	**HOUS1**
	Other [specify]	Yes/No	**HOUS1**
	Refused		**HOUS1**
	Don't Know		**HOUS1**

Housing Characteristics

Ask All

HOUS1. Now I have some questions about your home that might affect how much energy your household uses. How long have you lived at this residence?

#	Years		**HOUS2**
88	Refused		**HOUS2**
99	Don't Know		**HOUS2**

HOUS2. Do you **own or rent** your home**?**

1	Own		**HOUS4**
2	Rent		**HOUS3**
88	Refused		**HOUS4**
99	Don't Know		**HOUS4**

HOUS3. Do you pay your utility bill? Or does the landlord?

1	Tenant		**HOUS4**
2	Landlord		**HOUS4**
88	Refused		**HOUS4**
99	Don't Know		**HOUS4**

HOUS4. What type of dwelling is your home? [READ]

1	Single family detached		**HOUS5**
2	Mobile home		**HOUS5**
3	Row house/townhouse		**HOUS5**

4	Apartment/condominium/flat		**HOUS5**
5	Duplex/Triplex/Quad		
6	Other [specify]		**HOUS5**
88	Refused		**HOUS5**
99	Don't Know		**HOUS5**

HOUS5. How many rooms, including the kitchen, dining room, living rooms, dens, playrooms, and bedrooms are there in your home? Do not count the garage, bathrooms, hallways or unfinished basement?

#	Rooms		**HOUS6**
88	Refused		**HOUS6**
99	Don't Know		**HOUS6**

Ask if COOL1= 1 or 2 OR COOL12 = 1 or 2;
All others skip to HOUS7

HOUS6. How many of those rooms do you typically air condition?

1	All rooms		**HOUS7**
#	Rooms		**HOUS7**
88	Refused		**HOUS7**
99	Don't Know		**HOUS7**

HOUS7. How many of those rooms do you typically heat?

1	All rooms		**HOUS8**
#	Rooms		**HOUS8**
88	Refused		**HOUS8**
99	Don't Know		**HOUS8**

HOUS8. In what year was your home built?

#	Year		**HOUS10**
88	Refused		**HOUS9**
99	Don't Know		**HOUS9**

HOUS9. Was it built…? [READ RANGES]

1	In the last 10 years [i.e., since 2000]		**HOUS10**
2	In the 1990's		**HOUS10**
3	In the 1980's		**HOUS10**
4	In the 1970's		**HOUS10**
5	In the 1960's		**HOUS10**
6	In the 1950's		**HOUS10**
7	In the 1940's		**HOUS10**
8	Before 1940		**HOUS10**
88	Refused		**HOUS10**
99	Don't Know		**HOUS10**

HOUS10. About how large is your home in terms of total square feet?

#	Square Feet		**HOUS12**
88	Refused		**HOUS11**
99	Don't Know		**HOUS11**

HOUS11. Is it … [READ RANGES]

1	Less than 500 square feet		**HOUS12**

2	Between 500 and 1000 square feet		**HOUS12**
3	Between 1000 and 1500 square feet		**HOUS12**
4	Between 1500 and 2000 square feet		**HOUS12**
5	Between 2000 and 2500 square feet		**HOUS12**
6	Between 2500 and 3000 square feet		**HOUS12**
7	More than 3,000 square feet		**HOUS12**
88	Refused		**HOUS12**
99	Don't Know		**HOUS12**

HOUS12. Since January 1, 2007, have you done any remodeling or renovation or additions to this home?

1	Yes		**HOUS13**
2	No		**HH1**
88	Refused		**HH1**
99	Don't Know		**HH1**

HOUS13. Did the remodel increase or decrease the square footage of your house?

1	Increased		**HOUS14**
2	Decreased		**HOUS14**
3	No Change		**HOUS15**
88	Refused		**HOUS15**
99	Don't Know		**HOUS15**

HOUS14. By how much did the square feet in your home [FILL BASED ON PRIOR QUESTION INCREASE/DECREASE] as a result of the renovations? [PROMPT FOR BEST GUESS]

#	Square foot increase		**HOUS15**
#	Square foot decrease		**HOUS15**
88	Refused		**HOUS15**
99	Don't Know		**HOUS15**

HOUSE15. Did you have any renovations done to your home that would affect your energy use? Did you…. [READ LIST]

1	Replace old windows with new energy-efficient windows	**HOUS16**
2	Add new energy-efficient windows	**HOUS16**
3	Add insulation throughout the house	**HOUS16**
4	Other [RECORD ANSWER]	**HOUS16**
5	No	**HH1**
88	Refused	**HOUS16**
99	Don't Know	**HOUS16**

HOUS16. Approximately what month and year did you have these renovations made to your home? [PROMPT FOR BEST GUESS].

HOUS16a. [year]

1	2007	**HOUS16b**
2	2008	**HOUS16b**
3	2009	**HOUS16b**
4	2010	**HOUS16b**
88	Refused	**HH1**
99	Don't know	**HH1**

HOUS15b. [month]

1	January	**HH1**
2	February	**HH1**

3	March	**HH1**
4	April	**HH1**
5	May	**HH1**
6	June	**HH1**
7	July	**HH1**
8	August	**HH1**
9	September	**HH1**
10	October	**HH1**
11	November	**HH1**
12	December	**HH1**
88	Refused	**HH1**
99	Don't know	**HH1**

Household

Ask All

HH1. Now I have some questions about the number of people that live in your house. Thinking just about people that live in your home year-round, how many adults aged 18 and older live in your home?

#	Number of people total		**HH2**
88	Refused		**HH2**
99	Don't Know		**HH2**

HH2. How many of those people are 65 and older?

#	Number of people over 65		**HH3**
88	Refused		**HH3**
99	Don't Know		**HH3**

HH3. Still thinking just about people that live in your home year-round, how many children 2 years old and younger live in your home?

#	Number of babies		**HH4**
88	Refused		**HH4**
99	Don't Know		**HH4**

HH4. Still thinking just about people that live in your home year-round, how many between the ages of 12 and 20 live in your home?

#	Number of teenagers		**HH5**
88	Refused		**HH5**
99	Don't Know		**HH5**

HH5. Is there anyone living in your home who has a disability or medical condition that requires special equipment that regularly uses energy?

#	Number with special medical needs		**HH6**
88	Refused		**HH6**
99	Don't Know		**HH6**

HH6. Now I'd like to ask you question about any changes in the number of people living in your home. Since January of 2007, have you had any changes in the number of people living in your household?

#	Yes, the number of people increased [Specify by how many]		**HH7a**
#	Yes, the number of people decreased [Specify by how many]		**HH7a**

3	No Change		**HH8**
88	Refused		**HH8**
99	Don't Know		**HH8**

Approximately what month and year did the number of people in your home change? [PROMPT FOR BUEST GUESS]

HH7a. [year]

1	2007	**HH7b**
2	2008	**HH7b**
3	2009	**HH7b**
4	2010	**HH7b**
88	Refused	**HH8**
99	Don't know	**HH8**

HH7b. [month]

1	January	**HH8**
2	February	**HH8**
3	March	**HH8**
4	April	**HH8**
5	May	**HH8**
6	June	**HH8**
7	July	**HH8**
8	August	**HH8**
9	September	**HH8**
10	October	**HH8**
11	November	**HH8**
12	December	**HH8**
88	Refused	**HH8**
99	Don't know	**HH8**

HH8. Did your household participate in any other energy efficiency programs [READ LIST]?

1	Multi-family rebate	**HH9**
2	Single family rebate	**HH9**
3	Low-income energy efficiency	**HH9**
4	Appliance rebate	**HH9**
5	Unspecified rebate	**HH9**
6	Utility—someone insulated my home	**HH9**
7	Utility—someone gave me a free refrigerator	**HH9**
8	Utility—someone gave a setback thermostat	**HH9**
9	Utility—someone gave me an air conditioner or evaporative cooler	**HH9**
10	Utility—someone paid to take our old refrigerator or freezer	**HH9**
11	Other [specify]	**HH9**
12	Did not participate in any other programs	**HH9**
88	Refused	**HH9**
99	Don't know	**HH9**

HH9. What is your combined gross household annual income [READ LIST]?

1	Less than $25,000	**T&T**
2	Between $25,000 and $50,000	**T&T**
3	Between $50,000 and $100,000	**T&T**
4	Between $100,000 and $150,000	**T&T**
5	More than $150,000	**T&T**

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

CALIFORNIA STATEWIDE
LOW INCOME ENERGY EFFICIENCY PROGRAM IMPACT EVALUATION
2008 NON-PARTICIPANT SURVEY

April 26, 2010

VARIABLES FOR SURVEY	Values
Evap09	1,0
Furn_Replace09	1,0
Furn_Repair09	1,0
Weatherization09	List of measures installed
Utility	Utility name
Program name	Program name
Meas1_09	Measure Description
Meas2_09	Measure Description
Meas3_09	Measure Description
Meas4_09	Measure Description
Meas5_09	Measure Description

Participation and Measure Verification

Intro. Hello, this is <INTERVIEWER NAME> calling from Quantum Market Research on behalf of [UTILITY]. This is not a sales call. May I please speak with [PROGRAM CONTACT]?

I'm calling to do a survey about energy use, and we are calling you because our records show you participated in [UTILITY's] energy-saving [PROGRAM] in 2009.

[IF PROGRAM CONTACT NOT AVAILABLE]
Who would be the best person to ask a few questions about your energy-using appliances?

[IF NEEDED] [UTILITY] would like to better understand how households manage their energy use, and your input is very important.

A1. Just to check, did your household participate in [UTILITY]'s [PROGRAM NAME] in 2009. This is a program where a program representative came to your home and installed some energy savings devices and provided you with some information on how to save energy. Do you recall participating in the program?

1	Yes	**E1**
2	No	Prompt: Is there anyone else at your home that might remember [PROGRAM]?
77	Other [specify]	**T&T**
88	Refused	**T&T**
99	Don't know	**T&T**

Cooling Systems

I want to start by asking you a few questions about the cooling systems that you have in your home.

Ask if Evap09=0;
If Evap09=1, go to COOL12

COOL1. What type of cooling system do you have in your home? By cooling systems I mean, air conditioners, fans, and evaporative coolers. I have a list of cooling types, and I'd like to know which one your home has. [READ LIST; SELECT ALL THAT APPLY]

1	Central air conditioning with ducts		**COOL3**
2	Room air conditioning		**COOL2**
3	Evaporative cooler		**COOL3**
4	Room ceiling fans		**HEAT1**
5	Whole-house fan		**COOL3**
6	Stand-alone fans		**HEAT1**
7	None		**HEAT1**
88	Refused		**HEAT1**
99	Don't Know		**HEAT1**

COOL2. How many room air conditioners are in your home?

#	Number of room ACs total		**COOL3**
88	Refused		**COOL3**
99	Don't Know		**COOL3**

COOL3. Since January 1, 2007, have you installed any new cooling equipment? By cooling equipment, I mean central air conditioning, room air conditioners and evaporative coolers. I do not mean floor or ceiling fans.

1	Yes, central air conditioning		**COOL4**
2	Yes, room air conditioning		**COOL4**
3	Yes, evaporative cooler		**COOL4**
4	Yes, Whole-house fan		**COOL4**
5	No		**COOL7**
88	Refused		**COOL7**
99	Don't Know		**COOL7**

COOL4. Approximately what month and year did you install the new cooling equipment [PROMPT FOR BEST GUESS].

COOL4a. [year]

1	2007	**COOL4b**
2	2008	**COOL4b**
3	2009	**COOL4b**
4	2010	**COOL4b**
88	Refused	**COOL5**
99	Don't know	**COOL5**

COOL4b. [month]

1	January	**COOL5**
2	February	**COOL5**
3	March	**COOL5**
4	April	**COOL5**
5	May	**COOL5**

6	June	**COOL5**
7	July	**COOL5**
8	August	**COOL5**
9	September	**COOL5**
10	October	**COOL5**
11	November	**COOL5**
12	December	**COOL5**
88	Refused	**COOL5**
99	Don't know	**COOL5**

COOL5. Did the new cooling system replace an old system or is it a new addition to your home?

1	Replaced old system	**COOL6**
2	New addition	**COOL7**
88	Refused	**COOL7**
99	Don't Know	**COOL7**

COOL6. What type was the old cooling system that was removed and replaced with the new system? Was it central air conditioning, individual room air conditioners, or an evaporative cooler?

1	Central air conditioning	**COOL7**
2	Individual room air conditioners	**COOL7**
3	Evaporative cooler	**COOL7**
77	Other [specify]	**COOL7**
88	Refused	**COOL7**
99	Don't Know	**COOL7**

Ask if COOL1=1 or 2;
Others skip to COOL9

COOL7. Before participating in the [PROGRAM], how did you control your air conditioning system [CHOOSE ONE] in 2007 and 2008?

1	Set at one temperature and leave it	**COOL8**
2	Manually adjust temperature as needed	**COOL9**
3	Adjust temperature by programmable thermostat	**COOL9**
4	Other [specify]	**COOL9**
88	Refused	**COOL9**
99	Don't Know	**COOL9**

COOL8. At what temperature did you usually set the thermostat?

#	Temperature	**COOL9**
88	Refused	**COOL9**
99	Don't Know	**COOL9**

COOL9. Before participating in the [PROGRAM], how many days a year did you use your cooling system in 2007 and 2008? [READ LIST]

1	Not at all	**HEAT1**
2	10 days or less	**COOL10**
3	11-30 days	**COOL10**
4	31-60days	**COOL10**
5	61-90 days	**COOL10**
6	More than 90 days	**COOL10**
88	Refused	**COOL10**
99	Don't Know	**COOL10**

COOL10. What times of the day did you use your cooling system [CHOOSE AS MANY AS APPLY] in 2007 and 2008?

1	Morning	**HEAT1**
2	Afternoon	**HEAT1**
3	Evening	**HEAT1**
4	Night	**HEAT1**
5	All day	**HEAT1**
88	Refused	**HEAT1**
99	Don't Know	**HEAT1**

Ask if Evap09=1
If Evap09=0, go to HEAT1

COOL12. Our records show you received an evaporative cooler from [UTILITY'S] [PROGRAM NAME] program. Is that correct?

1	Yes	**COOL13**
2	No	**HEAT1**
88	Refused	**HEAT1**
99	Don't Know	**HEAT1**

COOL13. In the **two years before** participating in the [PROGRAM], have you purchased any new cooling equipment? By cooling equipment, I mean central air conditioning, room air conditioners and evaporative coolers. I do not mean floor or ceiling fans.

(Prompt if needed: We are interested in any cooling units you purchased in addition to the evaporative cooler installed through the [PROGRAM] and are focusing on the two years prior to when you participated in the [PROGRAM]), the years 2007 and 2008.

1	Yes, central air conditioning		**COOL14**
2	Yes, room air conditioning		**COOL14**
3	Yes, evaporative cooler		**COOL14**
4	Yes, Whole-house fan		**COOL14**
5	No		**COOL15**
88	Refused		**COOL15**
99	Don't Know		**COOL15**

COOL14. Approximately what month and year did you install the new cooling equipment [PROMPT FOR BEST GUESS].

COOL14a. [year]

1	2007	**COOL14b**
2	2008	**COOL14b**
3	2009	**COOL14b**
88	Refused	**COOL15**
99	Don't know	**COOL15**

COOL14b. [month]

1	January	**COOL15**
2	February	**COOL15**
3	March	**COOL15**
4	April	**COOL15**
5	May	**COOL15**
6	June	**COOL15**
7	July	**COOL15**
8	August	**COOL15**

9	September	**COOL15**
10	October	**COOL15**
11	November	**COOL15**
12	December	**COOL15**
88	Refused	**COOL15**
99	Don't know	**COOL15**

COOL15. Did the new evaporative cooler you received through [UTILITY][PROGRAM] replace an existing system or is it a new addition to your home?

1	Replaced existing system	**COOL16**
2	New addition	**COOL17**
88	Refused	**COOL17**
99	Don't Know	**COOL17**

COOL16. What type was the old cooling system that was removed and replaced with the new evaporative cooler? Was it central air conditioning, individual room air conditioners, or an evaporative cooler?

1	Central air conditioning	**COOL17**
2	Individual room air conditioners	**COOL17**
3	Evaporative cooler	**COOL17**
77	Other [specify]	**COOL17**
88	Refused	**COOL17**
99	Don't Know	**COOL17**

Ask if COOL13=5, 88, or 99;
If COOL13=1,2,3, or 4, skip to COOL18

COOL17. Is this evaporative cooler the only cooling system in your home, or are there other cooling units?

1	Other units	**COOL18**
2	No other units	**COOL19**
88	Refused	**COOL19**
99	Don't Know	**COOL19**

COOL18. How many of the following cooling units in addition to the evaporative cooler mentioned above are operating in your home at this time? [READ LIST]

1	Central air conditioning with ducts		**COOL19**
2	Room air conditioning		**COOL19**
3	Whole-house fan		**COOL21**
4	Room ceiling fans		**COOL21**
5	Stand-alone fans		**COOL21**
6	None		**COOL21**
88	Refused		**COOL21**
99	Don't Know		**COOL21**

Ask if COOL18 = 1 or 2
Others skip to COOL21

COOL19. Before you received the new evaporative cooler, how did you control your air conditioning system [CHOOSE ONE]?

1	Set at one temperature and leave it	**COOL20**
2	Manually adjust temperature as needed	**COOL21**
3	Adjust temperature by programmable thermostat	**COOL21**
4	Other [specify]	**COOL21**
88	Refused	**COOL21**

99	Don't Know	**COOL21**

COOL20. At what temperature did you usually set the thermostat?

#	Temperature	
88	Refused	**COOL21**
99	Don't Know	**COOL21**

COOL21. Prior to installing your new evaporative cooler, how many days a year did you use your old cooling system? [READ LIST]

1	Not at all	**HEAT1**
2	10 days or less	**COOL22**
3	11-30 days	**COOL22**
4	31-60days	**COOL22**
5	61-90 days	**COOL22**
6	More than 90 days	**COOL22**
88	Refused	**COOL22**
99	Don't Know	**COOL22**

COOL22. What times of the day did you use your old cooling system [CHOOSE AS MANY AS APPLY]?

1	Morning	**COOL23**
2	Afternoon	**COOL23**
3	Evening	**COOL23**
4	Night	**COOL23**
5	All day	**COOL23**
88	Refused	**COOL23**
99	Don't Know	**COOL23**

Heating Systems

I now have some questions about the heating systems that you have in your home.

Ask if Furn_Replace09=0 and Furn_Repair09=0;
If Furn_Replace09=1 go to HEAT11;
If Furn_Repair09=1, go to HEAT20;

HEAT1. Which of the following best describes your **primary heating system**? [READ]

1	Gas furnace	**HEAT2**
2	Electric forced air furnace	**HEAT2**
3	Electric Heat Pump	**HEAT2**
4	Electric Space Heater	**HEAT2**
5	None	**W1**
77	Other [specify]	**HEAT2**
88	Refused	**HEAT2**
99	Don't Know	**HEAT2**

HEAT2. Since January 1, 2007, have you purchased a new heater for your home? By heating appliances I mean a gas furnace, an electric forced air furnace, an electric heat pump, or electric space heater.

1	Yes, gas furnace		**HEAT3**
2	Yes, electric forced air furnace		**HEAT3**
3	Yes, electric heat pump		**HEAT3**
4	Yes, electric space heater		**HEAT3**
5	No		**HEAT7**

88	Refused		**HEAT7**
99	Don't Know		**HEAT7**

HEAT3. Approximately what month and year did you install the new heater [PROMPT FOR BEST GUESS].

HEAT3a. [year]

1	2007	**HEAT3b**
2	2008	**HEAT3b**
3	2009	**HEAT3b**
4	2010	**HEAT3b**
88	Refused	**HEAT4**
99	Don't know	**HEAT4**

HEAT3b. [month]

1	January	**HEAT4**
2	February	**HEAT4**
3	March	**HEAT4**
4	April	**HEAT4**
5	May	**HEAT4**
6	June	**HEAT4**
7	July	**HEAT4**
8	August	**HEAT4**
9	September	**HEAT4**
10	October	**HEAT4**
11	November	**HEAT4**
12	December	**HEAT4**
88	Refused	**HEAT4**
99	Don't know	**HEAT4**

HEAT4. Did the new heating system replace an old system or is it a new addition to your home?

1	Replaced old system	**HEAT5**
2	New additional system	**HEAT5**
88	Refused	**HEAT5**
99	Don't Know	**HEAT5**

HEAT5. Was your old heating system working prior to being replaced?

1	Yes	**HEAT6**
2	No	**HEAT6**
88	Refused	**HEAT6**
99	Don't Know	**HEAT6**

HEAT6. What type of heating system did the new heating system replace? Was it [READ]…?

1	Gas Furnace	**HEAT7**
2	Electric forced air furnace	**HEAT7**
3	Electric Heat Pump	**HEAT7**
4	Electric Space Heater	**HEAT7**
77	Other [specify]	**HEAT7**
88	Refused	**HEAT7**
99	Don't Know	**HEAT7**

HEAT7. Before participating in the [PROGRAM], how did you control your heating system [CHOOSE ONE]?

1	Set at one temperature and leave it	**HEAT8**
2	Manually adjust temperature as needed	**HEAT9**
3	Adjust temperature by programmable thermostat	**HEAT9**
4	Other [specify]	**HEAT9**
88	Refused	**HEAT9**
99	Don't Know	**HEAT9**

HEAT8. At what temperature did you usually set the thermostat for the heater?

#	Temperature	**HEAT9**
88	Refused	**HEAT9**
99	Don't Know	**HEAT9**

HEAT9. Before you participated in the [PROGRAM], about how many days a year did you use your heating system? [READ LIST]

1	Not at all	**W1**
2	10 days or less	**HEAT10**
3	11-30 days	**HEAT10**
4	31-60days	**HEAT10**
5	61-90 days	**HEAT10**
6	More than 90 days	**HEAT10**
88	Refused	**HEAT10**
99	Don't Know	**HEAT10**

HEAT10. What times of the day did you use your heating system [CHOOSE AS MANY AS APPLY]?

1	Morning	**W1**
2	Afternoon	**W1**
3	Evening	**W1**
4	Night	**W1**
5	All day	**W1**
88	Refused	**W1**
99	Don't Know	**W1**

Ask if Furn_Replace=1

HEAT11. Our records show the [UTILITY] [PROGRAM NAME] installed a new furnace. Is that correct?

1	Yes	**HEAT12**
2	No	**W1**
88	Refused	**W1**
99	Don't Know	**W1**

HEAT12. In the **two years before** participating in the [PROGRAM], have you purchased any new heating equipment?

(Prompt if needed: We are interested in any heating units you purchased in addition to the furnace installed through the [PROGRAM] and are focusing on the two years prior to when you participated in the [PROGRAM]), the years 2007 and 2008.

1	Gas Furnace	**HEAT13**
2	Electric forced air furnace	**HEAT13**
3	Electric Heat Pump	**HEAT13**
4	Electric Space Heater	**HEAT13**
77	Other [specify]	**HEAT13**
88	Refused	**HEAT14**

99	Don't Know	**HEAT14**

HEAT13. Approximately what month and year did you install the new cooling equipment [PROMPT FOR BEST GUESS].

HEAT13a. [year]

1	2007	**HEAT13b**
2	2008	**HEAT13b**
3	2009	**HEAT13b**
88	Refused	**HEAT14**
99	Don't know	**HEAT14**

HEAT13b. [month]

1	January	**HEAT14**
2	February	**HEAT14**
3	March	**HEAT14**
4	April	**HEAT14**
5	May	**HEAT14**
6	June	**HEAT14**
7	July	**HEAT14**
8	August	**HEAT14**
9	September	**HEAT14**
10	October	**HEAT14**
11	November	**HEAT14**
12	December	**HEAT14**
88	Refused	**HEAT14**
99	Don't know	**HEAT14**

HEAT14. What was your main source of heating before the new furnace was installed through the [PROGRAM] Was it [READ]…? [SELECT ALL THAT APPLY]

1	Gas Furnace	**HEAT15**
2	Electric forced air furnace	**HEAT15**
3	Electric Heat Pump	**HEAT15**
4	Electric Space Heater	**HEAT15**
77	Other [specify]	**HEAT15**
88	Refused	**HEAT15**
99	Don't Know	**HEAT15**

HEAT16. Did the new furnace replace an old system or is it a new addition to your home?

1	Replaced old system	**HEAT16**
2	New additional system	**HEAT16**
88	Refused	**HEAT16**
99	Don't Know	**HEAT16**

HEAT16. Was your old heating system working prior to being replaced?

1	Yes	**HEAT17**
2	No	**HEAT17**
88	Refused	**HEAT17**
99	Don't Know	**HEAT17**

HEAT17. What type of heating system did the new furnace replace? Was it [READ]…?

1	Gas Furnace	**HEAT18**

2	Electric forced air furnace	**HEAT18**
3	Electric Heat Pump	**HEAT18**
4	Electric Space Heater	**HEAT18**
77	Other [specify]	**HEAT18**
88	Refused	**HEAT18**
99	Don't Know	**HEAT18**

HEAT18. Before you participated in the [PROGRAM], how did you control your heating system [CHOOSE ONE]?

1	Set at one temperature and leave it	**HEAT19**
2	Manually adjust temperature as needed	**HEAT20**
3	Adjust temperature by programmable thermostat	**HEAT20**
4	Other [specify]	**HEAT20**
88	Refused	**HEAT20**
99	Don't Know	**HEAT20**

HEAT19. At what temperature did you usually set the thermostat for the heater?

#	Temperature	**HEAT20**
88	Refused	**HEAT20**
99	Don't Know	**HEAT20**

HEAT20. Before you participated in the [PROGRAM], about how many days a year did you use your furnace? [READ LIST]

1	Not at all	**W1**
2	10 days or less	**HEAT21**
3	11-30 days	**HEAT21**
4	31-60days	**HEAT21**
5	61-90 days	**HEAT21**
6	More than 90 days	**HEAT21**
88	Refused	**HEAT21**
99	Don't Know	**HEAT21**

HEAT21. What times of the day did you use your furnace [CHOOSE AS MANY AS APPLY]?

1	Morning	**W1**
2	Afternoon	**W1**
3	Evening	**W1**
4	Night	**W1**
5	All day	**W1**
88	Refused	**W1**
99	Don't Know	**W1**

Ask if Furn_Repair=1;

HEAT22. Our records show you had repairs done on your furnace through the [PROGRAM]. Is that correct?

	Yes	**HEAT23**
	No	**W1**
	Refused	**W1**
	Don't Know	**W1**

Now I have some questions about how much you use the heating systems in your house.

HEAT23. Since the new furnace was repaired through the [PROGRAM], to what extent has your use of your furnace changed? Would you say you used your furnace more, less, or about the same number of days as the you did after it was repaired?

1	Used the furnace more before it was repaired	**HEAT24**
2	Used the furnace less before it was repaired	**HEAT24**
3	Used the furnace about the same before it was repaired	**HEAT24**
88	Refused	**HEAT24**
99	Don't Know	**HEAT24**

HEAT24. Before you participated in the [PROGRAM], how did you control your heating system [CHOOSE ONE]?

1	Set at one temperature and leave it	**HEAT25**
2	Manually adjust temperature as needed	**HEAT26**
3	Adjust temperature by programmable thermostat	**HEAT26**
4	Other [specify]	**HEAT26**
88	Refused	**HEAT26**
99	Don't Know	**HEAT26**

HEAT25. At what temperature did you usually set the thermostat for the heater?

#	Temperature	**HEAT26**
88	Refused	**HEAT26**
99	Don't Know	**HEAT26**

HEAT26. Before you participated in the [PROGRAM], about how many days a year did you use your furnace?

1	Not at all	**W1**
2	10 days or less	**HEAT27**
3	11-30 days	**HEAT27**
4	31-60days	**HEAT27**
5	61-90 days	**HEAT27**
6	More than 90 days	**HEAT27**
88	Refused	**HEAT27**
99	Don't Know	**HEAT27**

HEAT27. What times of the day did you use your furnace [CHOOSE AS MANY AS APPLY]?

1	Morning	**W1**
2	Afternoon	**W1**
3	Evening	**W1**
4	Night	**W1**
5	All day	**W1**
88	Refused	**W1**
99	Don't Know	**W1**

Weatherization

Ask if Weatherization List includes measures

INCLUDE SPECIFIC MEASURE DESCRIPTION TO AUTOMATICALLY LOAD INTO QUESTION TEXT

W1. Our records show you [WEATHERIZATION LIST]. Is that correct?

1	Yes	**OTH1**

2	No	**OTH1**
88	Refused	**OTH1**
99	Don't Know	**OTH1**

Other Measures

Ask All

OTH1. Our records show that you also had additional energy efficiency measures installed in your home though the [UTILITY][PROGRAM], including:

[MEAS1, MEAS2, MEAS3, MEAS4…] Is this correct?

	Yes	**APP1**
	No	**APP1**
	Refused	**APP1**
	Don't Know	**APP1**

Appliance Characteristics

Now I am going to ask you some questions about other appliances that would affect your energy consumption.
ASK ALL

APP1. What kind of water heater do you have? [SELECT ALL THAT APPLY]

1	Gas Water Heater		**APP11**
2	Electric Water Heater		**APP11**
3	Solar		**APP11**
4	Other		**APP11**
88	Refused		**APP11**
99	Don't Know		**APP11**

APP11. I'm going to read a list of appliances, please tell me if you have purchased any of these since January 1, 2007. Have you purchase [READ LIST]:

	Clothes Washer	Yes/No	**APP12**
	Clothes Dryer	Yes/No	**APP12**
	Refrigerator	Yes/No	**APP12**
	Dishwasher	Yes/No	**APP12**
	Water Heater	Yes/No	**APP12**
	Made no purchases		**APP13**
	Refused		**APP13**
	Don't Know		**APP13**

APP12. Approximately what month and year did you purchase the new appliances [RECORD FOR EACH YES ANSWER IN PREVIOUS QUESTION].

APP12a. [year]

1	2007	**APP12b**
2	2008	**APP12b**
3	2009	**APP12b**
4	2010	**APP12b**
88	Refused	**APP13**
99	Don't know	**APP13**

APP12b. [month]

1	January	**APP13**
2	February	**APP13**
3	March	**APP13**
4	April	**APP13**
5	May	**APP13**
6	June	**APP13**
7	July	**APP13**
8	August	**APP13**
9	September	**APP13**
10	October	**APP13**
11	November	**APP13**
12	December	**APP13**
88	Refused	**APP13**
99	Don't know	**APP13**

APP13. Have you switched the use of any electrical appliances to equipment that uses gas or another fuel? I'm going to read a list of appliances, please tell me if you changed from electricity to a different fuel since January 1, 2007. [READ LIST]:

	Water heater	Yes/No	**HOUS1**
	Pool/spa heater	Yes/No	**HOUS1**
	Stove	Yes/No	**HOUS1**
	Oven	Yes/No	**HOUS1**
	Dryer	Yes/No	**HOUS1**
	Grill	Yes/No	**HOUS1**
	Other [specify]	Yes/No	**HOUS1**
	Refused		**HOUS1**
	Don't Know		**HOUS1**

Housing Characteristics

Ask All

HOUS1. Now I have some questions about your home that might affect how much energy your household uses. How long have you lived at this residence?

#	Years		**HOUS2**
88	Refused		**HOUS2**
99	Don't Know		**HOUS2**

HOUS2. Do you **own or rent** your home**?**

1	Own		**HOUS4**
2	Rent		**HOUS3**
88	Refused		**HOUS4**
99	Don't Know		**HOUS4**

HOUS3. Do you pay your utility bill? Or does the landlord?

1	Tenant		**HOUS4**
2	Landlord		**HOUS4**
88	Refused		**HOUS4**
99	Don't Know		**HOUS4**

HOUS4. What type of dwelling is your home? [READ]

1	Single family detached		**HOUS5**
2	Mobile home		**HOUS5**
3	Row house/townhouse		**HOUS5**
4	Apartment/condominium/flat		**HOUS5**
5	Duplex/triplex/quad		**HOUS5**
6	Other [specify]		**HOUS5**
88	Refused		**HOUS5**
99	Don't Know		**HOUS5**

HOUS5. How many rooms, including the kitchen, dining room, living rooms, dens, playrooms, and bedrooms are there in your home? Do not count the garage, bathrooms, hallways or unfinished basement?

#	Rooms		**HOUS6**
88	Refused		**HOUS6**
99	Don't Know		**HOUS6**

Ask if COOL1= 1 or 2 OR COOL12 = 1 or 2;
All others skip to HOUS7

HOUS6. How many of those rooms do you typically air condition?

1	All rooms		**HOUS7**
#	Rooms		**HOUS7**
88	Refused		**HOUS7**
99	Don't Know		**HOUS7**

HOUS7. How many of those rooms do you typically heat?

1	All rooms		**HOUS8**
#	Rooms		**HOUS8**
88	Refused		**HOUS8**
99	Don't Know		**HOUS8**

HOUS8. In what year was your home built?

#	Year		**HOUS10**
88	Refused		**HOUS9**
99	Don't Know		**HOUS9**

HOUS9. Was it built…? [READ RANGES]

1	In the last 10 years [i.e., since 2000]		**HOUS10**
2	In the 1990's		**HOUS10**
3	In the 1980's		**HOUS10**
4	In the 1970's		**HOUS10**
5	In the 1960's		**HOUS10**
6	In the 1950's		**HOUS10**
7	In the 1940's		**HOUS10**
8	Before 1940		**HOUS10**
88	Refused		**HOUS10**
99	Don't Know		**HOUS10**

HOUS10. About how large is your home in terms of total square feet?

#	Square Feet		**HOUS12**
88	Refused		**HOUS11**

99	Don't Know		**HOUS11**

HOUS11. Is it … [READ RANGES]

1	Less than 500 square feet		**HOUS12**
2	Between 500 and 1000 square feet		**HOUS12**
3	Between 1000 and 1500 square feet		**HOUS12**
4	Between 1500 and 2000 square feet		**HOUS12**
5	Between 2000 and 2500 square feet		**HOUS12**
6	Between 2500 and 3000 square feet		**HOUS12**
7	More than 3,000 square feet		**HOUS12**
88	Refused		**HOUS12**
99	Don't Know		**HOUS12**

HOUS12. Since January 1, 2007, have you done any remodeling or renovation or additions to this home?

1	Yes		**HOUS13**
2	No		**HH1**
88	Refused		**HH1**
99	Don't Know		**HH1**

HOUS13. Did the remodel increase or decrease the square footage of your house?

1	Increased		**HOUS14**
2	Decreased		**HOUS14**
3	No Change		**HOUS15**
88	Refused		**HOUS15**
99	Don't Know		**HOUS15**

HOUS14. By how much did the square feet in your home [FILL BASED ON PRIOR QUESTION INCREASE/DECREASE] as a result of the renovations? [PROMPT FOR BEST GUESS]

#	Square foot increase		**HOUS15**
#	Square foot decrease		**HOUS15**
88	Refused		**HOUS15**
99	Don't Know		**HOUS15**

HOUSE15. Did you have any renovations done to your home that would affect your energy use? Did you…. [READ LIST]

1	Replace old windows with new energy-efficient windows	**HOUS16**
2	Add new energy-efficient windows	**HOUS16**
3	Add insulation throughout the house	**HOUS16**
4	Other [RECORD ANSWER]	**HOUS16**
5	No	**HH1**
88	Refused	**HOUS16**
99	Don't Know	**HOUS16**

HOUS16. Approximately what month and year did you have these renovations made to your home? [PROMPT FOR BEST GUESS].

HOUS16a. [year]

1	2007	**HOUS16b**
2	2008	**HOUS16b**
3	2009	**HOUS16b**
4	2010	**HOUS16b**
88	Refused	**HH1**
99	Don't know	**HH1**

HOUS15b. [month]

1	January	**HH1**
2	February	**HH1**
3	March	**HH1**
4	April	**HH1**
5	May	**HH1**
6	June	**HH1**
7	July	**HH1**
8	August	**HH1**
9	September	**HH1**
10	October	**HH1**
11	November	**HH1**
12	December	**HH1**
88	Refused	**HH1**
99	Don't know	**HH1**

Household

Ask All

HH1. Now I have some questions about the number of people that live in your house. Thinking just about people that live in your home year-round, how many adults aged 18 and older live in your home?

#	Number of people total		**HH2**
88	Refused		**HH2**
99	Don't Know		**HH2**

HH2. How many of those people are 65 and older?

#	Number of people over 65		**HH3**
88	Refused		**HH3**
99	Don't Know		**HH3**

HH3. Still thinking just about people that live in your home year-round, how many children 2 years old and younger live in your home?

#	Number of babies		**HH4**
88	Refused		**HH4**
99	Don't Know		**HH4**

HH4. Still thinking just about people that live in your home year-round, how many between the ages of 12 and 18 live in your home?

#	Number of teenagers		**HH5**
88	Refused		**HH5**
99	Don't Know		**HH5**

HH5. Is there anyone living in your home who has a disability or medical condition that requires special equipment that regularly uses energy?

#	Number with special medical needs		**HH6**
88	Refused		**HH6**
99	Don't Know		**HH6**

HH6. Now I'd like to ask you question about any changes in the number of people living in your home. Since January of 2007, have you had any changes in the number of people living in your household?

#	Yes, the number of people increased [Specify by how many]		**HH7a**
#	Yes, the number of people decreased [Specify by how many]		**HH7a**
3	No Change		**HH8**
88	Refused		**HH8**
99	Don't Know		**HH8**

Approximately what month and year did the number of people in your home change? [PROMPT FOR BUEST GUESS]

HH7a. [year]

1	2007	**HH7b**
2	2008	**HH7b**
3	2009	**HH7b**
4	2010	**HH7b**
88	Refused	**HH8**
99	Don't know	**HH8**

HH7b. [month]

1	January	**HH8**
2	February	**HH8**
3	March	**HH8**
4	April	**HH8**
5	May	**HH8**
6	June	**HH8**
7	July	**HH8**
8	August	**HH8**
9	September	**HH8**
10	October	**HH8**
11	November	**HH8**
12	December	**HH8**
88	Refused	**HH8**
99	Don't know	**HH8**

HH8. Did your household participate in any other energy efficiency programs BESIDS the ones we've talked about, like a rebate program or some appliance program. [DON'T READ LIST IF R SAYS NO RIGHT AWAY]?

1	Multi-family rebate	**HH9**
2	Single family rebate	**HH9**
3	Low-income energy efficiency	**HH9**
4	Appliance rebate	**HH9**
5	Unspecified rebate	**HH9**
6	Utility—someone insulated my home	**HH9**
7	Utility—someone gave me a free refrigerator	**HH9**
8	Utility—someone gave a setback thermostat	**HH9**
9	Utility—someone gave me an air conditioner or evaporative cooler	**HH9**
10	Utility—someone paid to take our old refrigerator or freezer	**HH9**
11	Other [specify]	**HH9**
12	Did not participate in any other programs	**HH9**
88	Refused	**HH9**
99	Don't know	**HH9**

HH9. What is your combined gross household annual income [READ LIST]?

1	Less than $25,000	**T&T**
2	Between $25,000 and $50,000	**T&T**
3	Between $50,000 and $100,000	**T&T**
4	Between $100,000 and $150,000	**T&T**
5	More than $150,000	**T&T**
88	Refused	**T&T**
99	Don't know	**T&T**

Those are all the question I have for you. Thank you very much for your time and good information.

California Low Income Energy Efficiency (LIEE) Program On Site Survey Tool

ECONorthwest
September 17, 2010

Survey Date:_____

1. General Information

Site Visit ID*: _____ Reviewer Name or ID: _____

[G1]* Participant's Name _____

[G2]* Site Address: _____

[G3]* City/State/Zip: _____

[G4]* Telephone Number: _____

[G5]* House Type: ___

1	Single family detached>>>>	Construction Type
2	Mobile home	Ranch house
	Duplex/Tri-plex/Quad	Cape
3	Row house/townhouse	Colonial
4	Apartment/condominium/flat	Bungalow
5	Other [specify]	Victorian
88	Refused	Other [specify]
99	Don't Know	

[G6] Name of individual present during on-site survey: _____

* filled in from the program database

[G7] Total number of units in the building: _____

[G8] Number of stories: _____

[G9] Water source (circle one): Municipal Well Other _____

[G10] Type of basement (Circle one):

Slab Crawl Space Conditioned Semi-Conditioned Unconditioned

Other (specify) _____

[G11] Age of home _____

2. Participant Interview

Your household has participated in a program through your utility that helps save energy. Today we want to learn more about your experience with this program, as well as some general information about how you and your household think about and use energy. Your feedback – both positive and negative - is very important to us so please be honest. If you can't recall any part of the experience we will be discussing, feel free to just let us know that as well.

[NOTE TO INTERVIEWER: IT IS ENTIRELY LIKELY THAT THERE ARE DIFFERENT PEOPLE IN THE HOUSEHOLD RESPONSBILE FOR DIFFERENT CHORES AND WHO PLAY DIFFERENT ROLES IN THESE ACTIONS AND BEHAVIORS. IT IS IMPORTANT TO FIND OUT AS MUCH AS POSSIBLE ABOUT THESE INTERACTIONS. (E.G., "I often turn up the ac temp., but my elderly mom or teenage son come in and turn it down. OR "My spouse does the cooking and laundry, and I am not sure if his/ her behavior has changed as a result of the information we received?"

Also make sure that you probe all responses to get details needed in response slots. For example if respondent says, "I was away for a couple of months" Make sure you get dates. If you are not sure if information is important write down everything.]

A. Energy Education

[A1]. Through your participation in the LIEE program you received various energy efficiency products and services. Can you tell us if there was anything you "learned" about saving energy from your conversations with the contractors or the materials they provided? (OPEN ENDED QUESTION. PROBE FOR SPECIFICS AS NEEDED)

[A2]. Did you try any of the suggestions about how to save energy that were discussed? [RECORD ALL MENTIONED, FOLLOW EACH WITH QUESTION ABOUT WHETHER STILL DOING ACTION AND WHEN RELEVANT HOW FREQUENTLY]

	Do not select both columns			
	Did Before Audit	Took Action as a Result of Audit	Still Doing Action	How Frequently
TURN OFF THINGS WHEN NOT IN USE				
1a. Turn off Lights				
1b. Turn off Television, stereos				
1c. Turn off Computers				
1d. Turn off or unplug chargers, small electronics, or appliances				
1e. Turn off waterbed heater				
1f. Turn off other equipment				
CHANGE HEATING AND COOLING USE				
2a. Raise thermostat setting for cooling				
2b. Lower thermostat setting for heat				

	Do not select both columns			
	Did Before Audit	Took Action as a Result of Audit	Still Doing Action	How Frequently
2c. Turn down/up thermostat at night and when home is not occupied				
2d. Don't heat/cool unused rooms				
2e. Shade windows to keep house cool				
2f. Clean or replace furnace filter regularly				
2g. Install plastic wrap on windows				
CHANGE WATER AND HOT WATER USE, WASHING MACHINE				
3a. Lower hot water temperature				
3b. Wash with cold water				
3c. Wash with full load				
3d. Dry with full load				
3e. Dry clothes on line or rack				
REFRIGERATOR CHANGES				
4a. Disconnect second refrigerator or freezer				
4b. Keep refrigerator full				
4c. Vacuum refrigerator coils				
4d. Turn on refrigerator energy saver switch				
COOKING MEASURES				
5a. Thaw food before cooking				
5b. Use the microwave				
5c. Cover pots with lids when heating				
5d. Turn down burner when boiling point is reached				
PURCHASED SOMETHING				
6a. CFLs, energy efficient lights				
6b. Power strip				
6c. Caulking and weatherstripping				
6d. Plastic wrap for inside windows				
6e. Other, specify				
OTHER				
7a. Specify				

B. Measure Installations

Now I would like to review what was provided to you or installed in your household through your participation in the program.

Do you recall the LIEE program installing....

[Ma1] *ECM1?* Yes No

[Mb1] Is (are) # ECM1 still installed in your home? # in use _____

[Mc1] How satisfied are you with ECM1?

Very Dissatisfied				Very Satisfied	Don't Know
1❒	2❒	3❒	4❒	5❒	0❍

[Md1] If *ECM1* is no longer in place, is in poor condition or the participant is dissatisfied, ask why.
1) Product failed 2) Other, please specify: _____

[Ma2] ECM2? Yes No
[Mb2] Is (are) # of ECM2 still installed in your home? # in use _____
[Mc2] How satisfied are you with ECM2?

Very Dissatisfied				Very Satisfied	Don't Know
1❒	2❒	3❒	4❒	5❒	0❍

[Md2] If *ECM1* is no longer in place, is in poor condition or the participant is dissatisfied, ask why.
1) Product failed 2) Other, please specify: _____

[Ma3] ECM3? Yes No
[Mb3] Is (are) # of ECM3 still installed in your home? # in use _____
[Mc3] How satisfied are you with *ECM3?*

Very Dissatisfied				Very Satisfied	Don't Know
1❒	2❒	3❒	4❒	5❒	0❍

[Md3] If *ECM1* is no longer in place, is in poor condition or the participant is dissatisfied, ask why.
1) Product failed 2) Other, please specify: _____

[Md10] Were any other energy saving devices installed through the LIEE program?
List: _____

[Md11] Participant Comments (use to record any useful or interesting information volunteered):

_____

_____

C. Heating and Cooling System Information

Today we are especially interested in gathering information about how you heat and cool your home, and the implications that this has on your energy use. So, I'd like to ask you some more detailed questions that are specifically related to heating and cooling.

[SH1] How many people are currently living in your home and how has that changed over last three years? [Record on Timeline] Record vacations that are longer than 2 weeks

[SH1a] Have there been any significant changes during the past year that has affected either your overall electric usage or how you regulate the temperature?

Number of Occupants

	Number at beginning (3 years ago)						Number in home today
Record number of people in home							
(use 2nd line if necessary)							
Example	4	3 effective 4/10/09	2 effective 6/10/09	3 effective 12/10 09			3

Heating Season—Thermostat Setting

	Average Thermostat setting at beginning (3 years ago)						Average Thermostat setting today
Use this row if no night setback							
Average daily thermostat							
Use these rows if night setback							
Daytime average							
Nighttime average							

Heating Season—Use of Equipment

	Use/Not Use Three Years ago						Use Not Use Now
Use of Primary Heat—What Changed							
When							
Use of Secondary Heat—What Changed							
When							

Cooling Season—Thermostat Setting

	Average Thermostat setting at beginning (3 years ago)						Average Thermostat setting today
Use this row if no night setback							
Average daily thermostat							
Use these rows if night setback							
Daytime average							
Nighttimes average							

Cooling Season—Use of Equipment

	Use/Not Use Three Years ago						Use Not Use Now
Use of Primary Cooling—What Changed							
When							
Use of Secondary Cooling—What Changed							
When							

[SH1b] Did anything else happen to this home? Addition, new refrigerator, large medical equipment?
What changed_____ start date_____ end date: _____
What changed_____ start date_____ end date: _____
What changed_____ start date_____ end date: _____

[SH2] How many rooms do you have in your home? ____

[SH3] How many rooms do you heat? ___

[SH4] How many rooms do you cool? ___

<u>Heating Questions – Asked Of LIEE Furnace Folks Only</u>

Skip to C1 if SH3 =0

[SH5] Since January 1, 2007, have you purchased a new heater for your home? By heater I mean a gas furnace, an electric forced air furnace, an electric heat pump, electric baseboard or electric space heater
yes ___no__ What equipment _____

When, month _____ year _____

[SH6] Since January 1, 2007, have you had your heating system repaired?

When, month _____ year _____

[SH7] If SH6 = yes, did you pay for the repairs or was it done by LIEE or WAP or other source.

Paid for ourselves _____ LIEE _____ WAP _____ other ___ specify _____

[SH8] What is main way that you heat your house in the winter?

1	Gas Furnace
2	Gas Space Heater
3	Electric forced air furnace
4	Electric Heat Pump
5	Electric Baseboard
6	Portable Electric Space Heater
7	Portable Kerosene or Propane Space Heater
77	Other [specify]
88	Refused
99	Don't Know

[SH9] We need to understand how often you use this equipment: Probe for number of days per year or when temperature reaches threshold.

Not at all 10 days or less 11-30 days 31-60 days More than 60 days
OR when temperature outside falls below_____
Or other reason_____, get frequency and when

SH10] What times of the day do you use your primary heating system (circle as many as apply)?

Morning Afternoon Evenings Night All Day

[SH11] *How do you control your primary heating system* (choose one)?

First, can you tell me a little bit about how you manage or regulate the temperature in your home? Describe how you generally heat and cool the house? In other words, do you have certain times of the day when you like it warmer in the winter? And/or cooler in the summer? Does it depend on who is in the home at the time? If certain people are visiting? (e.g., grandma comes to visit in the summer for a month; we need to keep the house a little cooler than we normally would?)

____ Set at one temperature and leave it
What temperature_____
Record temperature setting of thermostat: _____

____ Manually adjust temperature as needed
____ Setback using programmable thermostat (record from thermostat if possible)
____ Other: _____
[Calculate average daytime temperature]
[Calculate average nighttime temperature]
[fill in Heating chart for Current values]

Changes In Heating During Study Period

[SH12] Over the last three years, were there any other circumstances that caused you to change the way you operate the thermostat or the temperature you heat the home? [if yes, calculate appropriate values and insert into Heating chart]

[SH13] Do you have any issue or problems in keeping your home at a temperature that is comfortable? What? DESCRIBE. (OPEN ENDED) PROBE: Issues with physical structure? Family Members? Equipment? Finances? Other?

[SH14] Is there any other way that you heat your home or certain rooms in your home? (Identify as many as apply.)

1	Gas Furnace
2	Gas Space Heater
3	Electric forced air furnace
4	Electric Heat Pump
5	Electric Baseboard
6	Portable Electric Space Heater
7	Portable Kerosene or Propane Space Heater
8	Cooking stove
9	None
77	Other [specify]
88	Refused
99	Don't Know

[IF SH14=9 (NO SECONDARY HEAT), SKIP to SH18.]

[SH15] We need to understand how often you use this equipment: Probe for number of days per year or when temperature reaches threshold.

Not at all 10 days or less 11-30 days 31-60 days More than 60 days
OR when temperature outside falls below_____
Or other reason_____, get frequency and when

[SH16] What times of the day do you use your secondary heating system (circle as many as apply)?

Morning Afternoon Evenings Night All Day

[SH17] Why do you use a secondary heat source (mark as many as apply)?

1	Central system doesn't reach all rooms
2	Central system doesn't provide enough heat on very cold days
3	Trying to save money on gas or electric bills
4	Unable to pay gas or electric bill
5	Secondary heat source provides more comfort in some areas of home
77	Other [specify]
88	Refused
99	Don't Know

[SH18] Other comments about thermostat or heating system use (Record any related comments):
_____

Cooling Questions – Asked Of LIEE Evap Cooler Folks Only

[C1] Did you purchase any new AC equipment in last 3 years? [record on charts]

Central A/C

[C2] Do you have a central A/C system? Yes _____ No _____

[C3] If so, is it in working condition? Yes _____ No _____

All Cooling Systems

[C4] What is the main way that you cool your house in the summer?

1	Central A/C
2	Room A/C's
3	Evaporative cooler
77	Other [specify]
88	Refused
99	Don't Know

[C5] Is there any other way that you use to cool your home?

1	Central A/C
2	Room A/C's
3	Evaporative cooler
77	Other [specify]
88	Refused
99	Don't Know

[C6] Under what conditions or circumstances would you use this method to cool your home?

1	Central system doesn't reach all rooms
2	Central system doesn't provide enough cooling on very hot days
3	Trying to save money on electric bill
4	Unable to pay electric bill
5	Secondary cooling source provides more comfort in some areas of home
77	Other [specify]
88	Refused
99	Don't Know

[C7] We need to understand how often you use this equipment: Probe for number of days per year or when temperature reaches threshold.

Not at all 10 days or less 11-30 days 31-60 days More than 60 days
OR when temperature outside falls below_____
Or other reason_____

Are there any circumstances that cause you to deviate from this general rule of thumb? E.g., it is really humid, grandma is over, I'm working at home – rather than in the office, the inside of the house does not cool off at night, (relative to the outside temperature), etc.

[C8] What times of the day do you use your air conditioner (circle as many as apply)?

Morning Afternoon Evening Night All Day

[C9] How do you use your air conditioner on the hottest day of the year (circle one)?

Less than usual About the same More than usual

[C10] How do you control your air conditioner (choose one)?

____ Set at one temperature and leave it
What temperature_____
Record temperature setting of thermostat: _____

____ Manually adjust temperature as needed
____ Setback using programmable thermostat (record from thermostat if possible)
____ Other: _____
[Calculate average daytime temperature]
[Calculate average nighttime temperature]
[fill in Heating chart for Current values]

For homes with evaporative coolers:
Tell me when and why you generally use your evaporative cooler?
PROBES:
Are there certain times of the day that you use it?
Are there external / weather related conditions that determine when you use it?
How often do you use it without using your main air conditioner?

[C11] When do you use your evaporative cooler (circle as many as apply)?

Morning Afternoon Evening Night All Day

[C12] Do you keep any windows open when the evaporative cooler is running (circle one)?

Never Sometimes Always

[FOR HOMES WHO RECEIVED EVAPORATIVE COOLERS THROUGH THE PROGRAM.] The next questions are about how you used your air condition prior to receiving the evaporative cooler through the LIEE program.

[C13] In the year before receiving the evaporative cooler through the LIEE program, how many days a year did you use your air conditioner (circle one)?

Not at all 10 days or less 11-30 days 31-60 days 61-90 days More than 90 days

[C14] What times of the day did you use your air conditioner (circle as many as apply)?

Morning Afternoon Evening Night All Day

[C15] How did you use your air conditioner on the hottest day of the year (circle one)?

Less than usual About the same More than usual

For homes with both evaporative coolers and A/C:

[C16] Do you ever run the evaporative cooler and the air conditioning at the same time (circle one)?

Never Sometimes Always

[C17] Do you draw your shades or drapes during the day on hot, sunny days?

Never Sometimes Always

[C18] Since the evaporative cooler was installed through the [PROGRAM], to what extent has your use of your other air conditioner changed? Would you say you [READ LIST]

1	Do not use AC at all anymore	
2	Use AC a lot less than I used to	
3	Use AC somewhat less than I used to	
4	Use AC about the same as I used to	
5	Use AC more than I used to	
88	Refused	
99	Don't Know	

Now with your permission I would like to inspect your home and the measures that the LIEE program installed.

3. Audit Section

A. Photographs

2 photographs of the exterior (from different angles)
Nameplates of all A/C units (room, wall and/or central) and evaporative cooler (for the cooling survey)
Nameplate of DHW tank
Missed opportunities, as appropriate
Unusual configurations

B. Thermal Shell

[TS1] Floor area (square feet):

Floor	Conditioned	Unconditioned
Basement		
1st		
2nd Floor		
3rd Floor		
Attic		
Other		

Wall Area (square feet):

	N	NE	E	SE	S	SW	W	NW
Wall Area of Conditioned Space								
Window area in conditioned space								
Attic wall area in conditioned space*								

*Attic covers all slant walls, flat ceiling, cathedral ceiling and other non-vertical walls, including sky lights.

C. Kitchen

Refrigerators and Freezers

List all refrigerators and freezers.

ID	Type of Unit (coded)	Size (cu. ft.)	Approximate Age (years)	Location Code	Condition Code	Source Code
KR1						
KR2						
KR3						
KR4						

[K1] Maximum temperature of hot water at the tap: _____ (approximate)

[K2] Notes: _____

_____

D. Space and Water Heating Systems

Water Heaters

ID	DHW Tank Type Code	Fuel Type Code	Size (Gal)	Existing Wrap (Y/N/DK)?	Condition of Wrap (Coded)	If no wrap, can tank be wrapped (Y/N/DK)?	>= 6 ft. of pipe insulation (Y/N/DK)?	Tank Wrap Source Code
W1								
W2								

[WH1] Notes: _____

_____

_____

Space Heating Equipment

ID	Primary/ Secondary	HS Type Code	Fuel Type Coded	In working condition? (Y/N)	Source Code	Comments
HS1						
HS2						
HS3						
HS4						

E. Cooling

Cooling Equipment

[CLG1] If cooling season, record thermostat setting: _____,

List all cooling equipment. For the cooling survey, include a legible photograph of the nameplate for each unit.

	Both General and Cooling Surveys				**Cooling Survey Only**		
ID	Loca-tion Code	Cooling System Type Code	Condi-tion Code	Source Code	Make	Model	Size (Specify Btuh or tons)
CL1							
CL2							
CL3							
CL4							
CL5							
CL6							
CL7							

[CLG2] Notes:_____

_____

F. Other Opportunities

ID	Measure	Describe in Detail
O1	Thermal shell	
O2	Door sweeps	
O3	Evaporative cooler (home must have refrigerant-based AC)	
O4	Duct sealing	
O5	Attic Insulation	
O6	Other - specify _____	
O7	Other - specify _____	

G. Inspector Assessment – to be completed after site visit

Based on your interview and observations, do you think this household . . .

	Not at All				Definitely	Unable to Assess
[IA1] received effective energy education from the Low Income Energy Efficiency program?	1❒	2❒	3❒	4❒	5❒	0❍

[IA1a] Please elaborate: _____

_____

[IA2] changed energy practices in a meaningful way due to the program's energy education?	1❒	2❒	3❒	4❒	5❒	0❍

[IA2a] Please elaborate: _____

_____

[IA3] incorporates energy efficiency into its everyday practices and decisions?	1❒	2❒	3❒	4❒	5❒	0❍

[IA3a] Please elaborate: _____

_____

[IA4] Was this home served by another efficiency program (LIHEAP, municipal, etc.)?
Y N Unsure

[IA4a] Please elaborate (give time frame):_____

[IA5] Additional comments or observations?

_____

_____

_____

Codes

Refrigerators and Freezers

Refrig/Freezer Unit Codes:		Location Codes:		Condition Codes:		Source Codes:	
Prefix		Kitchen	K	Less than 10 year old & in good condition	L10	LIEE	LI
Primary	P-	Basement/Garage	B	Over 10 years old	O10	Other Program	OP
Secondary	S-	Other	specify	Poor gasket, <10 yrs old	GSK	Purchased	CP
				Compressor problems, <10 yrs old	COM	Don't know	DK
Refrigerator/Freezer	RF			Secondary unit, could be removed	SEC	Existing	EX
Chest Freezer	CFZ			Other	specify	Other	Specify
Upright Freezer	UFZ						
Refrigerator only	RO						
Other	specify						
Example: P-RF is primary refrigerator/ freezer combo.							

Water Heaters

DHW Tank Types:		Fuel Types:		Condition:		Source Codes:	
Stand alone	SA	Natural gas	NG	Excellent	1	LIEE	LI
On demand	OD	Electric	EL	Good	2	Other Program	OP
Integrated w/boiler	IN	Propane	LP	Fair	3	Purchased	CP
Central (MFB)	CN	Other	OT	Poor	4	Don't know	DK
Other	specify					Existing	EX
						Other	Specify

Space Heating Equipment

HS Type Codes:		Fuel Types:		Source Codes:	
Furnace	F	Natural gas	NG	LIEE	LI
Wall Furnace	WF	Electric	EL	Other Program	OP
Boiler	B	Propane	LP	Purchased	CP
Heat Pump	HP	Other	OT	Don't know	DK
Electric baseboard	E			Existing	EX
Heating Stove	ST			Other	Specify
Space Heater	SH				
Central (MFB)	CN				
Other	specify				

Cooling Equipment

Location:		Cooling System Types:		Condition Codes:	
Bedroom	B	Central	CAC	Less than 10 year old &in good condition	L10
Basement	C	Evaporative cooler	EVAP	Over 10 years old	O10
Dining	D	Room A/C	RAC	In need of repair	REP
Family Rm/Den	F	Whole house fan	WHF	Not in working condition	NW
Garage	G	Other	specify	Other	specify
Hallway	H				
Kitchen	K				
Living	L				
Central A/C - Shaded	S				
Central A/C - Not Shaded	NS				
Other	specify				

Source Codes:	
LIEE	LI
Other Program	OP
Purchased	CP
Don't know	DK
Existing	EX
Other	Specify