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## **2010–2012 PG&E AND SCE WHOLE HOUSE RETROFIT PROCESS EVALUATION STUDY – APPENDICES – PGE0302.02**

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Prepared for

**PACIFIC GAS AND ELECTRIC COMPANY  
SOUTHERN CALIFORNIA EDISON**

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## INTRODUCTION

These appendices present the interview and survey guides used to collect data, the frequency tabulations from our quantitative surveys, and sample reports from on-site inspections .

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# 1. PROGRAM MANAGER INTERVIEW GUIDE

## Introduction

Thank you for taking the time to talk with me today. The SBW evaluation team is currently conducting a process evaluation of the Energy Upgrade California Whole House Services Program. We'd like to get your insight by asking you some questions that may take as long as 90 minutes to cover. We are sensitive to your time and there is a lot of information to cover, so if you think that there is a more efficient way the question may be answered —either in supporting documentation you can provide us offline, or in documentation that was already provided through the data request —please let us know and we will move on to other questions.

## Background/ Overview

1. Can you please describe your responsibilities with the EUC program? [Probe for involvement in the following program activities: coordination with finance agents; incentive processing; marketing; coordination with HEES; coordination with local entity partners; contractor training; contractor communication]
  - Who do you normally work with within SCE/PG&E?
  - Who do you work with outside of SCE/PG&E?
  - About what percentage of your week is spent on EUC activities?
  - How long have you been involved with the program?

## Program Delivery

2. How has the program delivery changed, if at all, since the program was launched?
  - If so, how has it changed?
  - Why was/were the change(s) made?
3. [ASK IF RESPONDENT'S ROLE ALLOWS PERSPECTIVE ON STATEWIDE COORDINATION] So far, what would you say have been the program's successes and challenges with respect to statewide coordination?
  - [ASK IF SUCCESSES] Please describe these successes.
  - [ASK IF CHALLENGES] Please describe these challenges.
  - [ASK IF CHALLENGES] Can you think of any possible solutions to these challenges?

## Homeowner Participation

4. How has homeowner participation in the program been going from your perspective? [Probe for: More than expected, About what was expected, Less than Expected]

- Can you describe the difference in participation between the Basic and Advanced tracks? Which have been more attractive to customers so far? Why do you think that is?
5. What is the approximate conversion rate from audit to implementation of upgrades by Basic and Advanced tracks?
- Is this higher or lower than the expected rate?
  - Why is it higher or lower?
6. Going forward, what do you think can be done to increase/maintain the conversion rate?
- What specifically can be done for the Basic track?
  - What specifically can be done for the Advanced track?
  - How can contractors increase jobs and homeowner engagement?
7. What do you think enrollment and retrofit numbers will look like over the next 6 months?
- What makes you say this?
8. What are the top barriers to getting customers to participate in the first step of the program, i.e. the audit?
- Are there any solutions that you would recommend to address these customer barriers?
  - How do they differ by track, if at all?
9. What are the top barriers to getting customers to take action after an audit?
- Are there any solutions that you would recommend to address these customer barriers?
  - How do they differ by track, if at all?
10. Have there been any customer complaints with the program? If so, how were they resolved?

### **Contractor Participation**

11. From your perspective, what do contractors think of this program so far?
- Have there been any complaints with the program? If so, how were they resolved?
  - What feedback have you heard from contractors that have yet to enroll in the program?
  - What feedback have you heard from contractors that have enrolled?

12. Roughly, how many contractors have participated in the program thus far? Basic and Advanced? [INTERVIEWER NOTE: PG&E PIP states an annual goal of 73 enrolled contractor firms]
  - Is this more or less than expected?
  - Why do you believe contractor participation is higher/lower than expected?
13. What are challenges the program has experienced thus far to get contractors to enroll in the program?
  - Have these changed since program inception?
  - Are there any solutions that you would recommend to address these challenges?
14. Going forward, what do you think can be done to maintain the number of contractors currently enrolled in the program?
  - What specifically can be done for the Basic track?
  - What specifically can be done for the Advanced track?
15. We understand that some contractors are more involved in the program than others. Some are performing multiple jobs and others are only performing one or two. Why do you think this is happening? [PROBE FOR: Different characteristics of contractors, size of contractors, stronger relationships with the program, etc]
16. Going forward, what do you think can be done to help some of the “low activity” contractors to increase their involvement in the program?
  - What specifically can be done for the Basic track?
  - What specifically can be done for the Advanced track?

### **Contractor Recruitment**

17. Considering the different ways that the program has recruited contractors, what has been successful?
  - In what ways has it been successful?
  - How and why has it been successful?
18. Considering contractor recruitment, what has been challenging?
  - In what ways has it been challenging?
  - How have/can these challenges be overcome?

### **Contractor Training**

19. What are the successes and challenges associated with contractor training?
  - Please describe each one.
20. Aside from the series of BPI certification classes, what training does the program provide the contractors?

- Is program training geared toward helping contractors with how to engage the customer and sell the benefits of the program?
21. How would you describe the “interaction” between the two different certification criteria – BPI and HERS II?
- Do you find the interaction successful?
  - Why or why not?
  - How could it be improved?
22. How would you describe contractor participation in program training activities?
- Are dropouts typical?
  - If so, at what point in the process are they dropping out?
  - Does this depend on whether the training is:
    - A BPI series of classes?
    - the program’s orientation training workshop?
    - For the advanced or basic tracks?
23. In what ways, could the contractor training be improved or changed to achieve contractor sector goals?
24. How do you determine whether a training session was successful?
- Do you debrief on whether a training session was successful and then try to incorporate lessons learned into future training sessions?
25. Is the QA/QC inspection outcome used to create future training requirements for individual contractors?
- If yes, could you describe this process?
26. In what ways might the current contractor training be improved?

### **Customer-Facing Marketing**

27. Based on our review of program materials, marketing and outreach channels have included direct mail, internet, contractors and other local entities such as local governments and non-profit organizations. Could you briefly describe any other channels?
28. What marketing channels have been most effective, in your opinion? Which have generated the most participation in the program?
29. In your opinion, how have the coordinated marketing efforts with contractors, local government, non-profits, etc., gone?
- What has been successful? In what ways?
  - What has been challenging? In what ways?

- What are some ways, if any, you would like to see the coordinated M&O efforts improved?
30. What segment or segments of the customer market has your EUC program been targeting, if any?
  - Are people participating as part of larger projects they are undertaking anyway?
  - Are there certain types of homeowners that the program does not reach?
  - If so, what types?
31. What do you think is the most effective marketing message so far? What attracts homeowners to invest in the recommended improvements?
32. Is there any mechanism for tracking customers that have inquired about the program but not participated (either in the audit or the upgrades) in it?
  - If so, could you describe this tracking process?
33. What is the approximate conversion rate from contact to audit?
  - Is this higher or lower than the expected rate?
  - Why is it higher or lower?
34. What are the successes and challenges associated with marketing? [PROBE FOR: Overall Strategy, Channels, Targeting, Messaging, Materials]
  - Please describe each one.
35. In what ways, if any, do you think the M&O efforts should be improved?

### **Collaboration with Local Government Entities**

36. We found that SCE/PG&E works with the following local entities. [INTERVIEWER: Refer to list below for each IOU]: Could you briefly list any other local entities we overlooked?
37. Could you briefly describe your collaboration with local entities?
  - How does this vary across the local entities?
38. What have been the benefits of working with these entities? What have been the challenges with working with these entities?
39. Various cities and counties have offered premium incentives to participants. Have these premium incentives influenced participation? If so, how?
40. In what ways, if any, could the collaboration with local entities be improved?

### **Quality Control**

41. Have there been changes in how the program performs QC?
  - If so, please describe the changes.
42. What have been the challenges, if any, when dealing with contractors around quality control issues?
43. Has the quality of work the contractors are performing improved or not?
  - If so, how? What has changed?
44. How can the QC process be improved, if at all?

### **Energy Savings**

45. Initially, the target energy savings goal for the advanced program was an average of 20% per home. Do expectations match performance?
  - If not, why?

### **Opportunities for Program Improvement**

46. Are there any other opportunities for program improvement that we haven't covered so far? If so, please describe.

### **Future Research Efforts**

47. What are some areas you would like us to explore in our upcoming research efforts?
  - With customers?
  - With contractors?
48. Is there anything else about the program you feel is important for us to understand?

## 2. LOCAL ENTITY INTERVIEW GUIDE

### Introduction

Thank you for taking the time to talk with me today. The SBW evaluation team is currently conducting a process evaluation of the Energy Upgrade California Whole House Services Program. We'd like to get your insight by asking you some questions that may take about an hour to cover. We are sensitive to your time and there is a lot of information to cover, so if you think that there is a more efficient way the question may be answered —either in supporting documentation you can provide us offline, or in documentation that was already provided through the data request —please let us know and we will move on to other questions. Notably, this is a 2-year evaluation and we will likely contact you again with similar questions next Fall.

### Background/ Program Delivery

1. Can you please describe your specific role and responsibilities that relate to the EUC program? [Probe for involvement in the following program activities: coordination with finance agents; customer interaction; marketing; coordination with the Home Energy Efficiency Survey Program (HEES); coordination with utilities/CEC or others; contractor communication]
  - Who do you normally work with within SCE/PG&E?
  - How long have you been involved with the program?
  - How do your efforts tie in with the Energy Upgrade CA program?
2. How many other people at [local gov't entity] are actively involved with the program? What are their roles and responsibilities?
3. How long has your organization been involved in the EUC program?
4. Can you please describe how your organization works with the EUC program? [PROBE FOR: marketing support, additional incentive dollars]
  - How does your organization help deliver the EUC program to local residents?
5. How has the program delivery changed, if at all, since the EUC program was launched?
  - If so, how has it changed?
  - Why was/were the change(s) made?
6. Did your organization promote energy efficiency to the residential population prior to the EUC program? If so, how?

7. What type of incentive(s) (if any) is your organization currently offering to consumers or contractors - in support of the Energy Upgrade CA program?
  - Were these via block grants?
  - Were these limited time offers?
  - How much and how do consumers/contractors qualify
  - Have these incentives been successful? If so, how?
  - Have they influenced participation?

**Program Goals [FOCUS ON THE LOCAL ENTITIES INITIATIVE GOALS NOT WHOLE EUC PROGRAM]**

8. Does [INSERT LE] have any EUC goals? If so, what are these?
9. About how many homes have been enrolled and completed thus far? Is this more or less than expected?
  - Why has the number of homes been more/less than expected?
  - (Ask if fewer than expected) How can the number of homes increase?
10. With respect to program goals, what have been the program successes and challenges so far?
  - [ASK IF SUCCESSES] Please describe these benefits.
  - [ASK IF CHALLENGES] Please describe these challenges.
  - [ASK IF CHALLENGES] Can you think of any possible solutions to these challenges?

**Marketing**

11. In terms of marketing and outreach channels, we are aware of the [INSERT LE]-specific web page, and assume that you have also used or modified some existing program materials from the IOUs. Could you briefly describe the marketing efforts you have done to help promote the EUC program?
12. Could you please describe the contractor-led marketing and outreach?
  - What are the successes and challenges associated with M&O efforts through this channel?
13. What have been the main marketing messages communicated through each channel? Could you give us the approximate time-frames for each?
14. Are there any marketing materials that you can share with us?
15. What are the successes and challenges associated with marketing? [PROBE FOR: Overall Strategy, Channels, Targeting, Messaging, Materials]
  - Please describe each one.

16. In what ways, if any, do you think the M&O efforts should be improved?
17. [ASK PG&E LE's ONLY] What do you think of PG&E's marketing materials? (PROBE FOR good, bad, or indifferent)
  - What, if anything, would you suggest be changed in PG&E's marketing materials?

### **Contractor Participation**

18. Does your organization interact with contractors as part of the program at all? If so, how?

[SKIP TO NEXT SECTION IF NO CONTRACTOR INTERACTION]
19. What has been the perception of the program in the marketplace among local contractors?
  - Have there been any complaints with the program? If so, how were they resolved?
  - What feedback have you heard from contractors that have yet to enroll in the program?
  - What feedback have you heard from contractors that have enrolled?
20. Could you give an overview of contractor training efforts associated with the program and taking place in your area?
  - What has been the [local entity] role in these trainings?
  - Who are the target contractor training audiences?
  - What has been your experience with the two certification programs, BPI and HERS2?
  - Is program training geared toward helping contractors with how to engage the customer and sell the benefits of the program?

### **Homeowner Participation**

21. What is the perception of the program in the marketplace among local residents (i.e., those within the LE's jurisdiction)?
22. How has homeowner participation in the program been going from your perspective? [Probe for: More than expected, About what was expected, Less than Expected]
  - Can you describe the difference in participation between the Basic and Advanced tracks? Which have been more attractive to customers so far? Why do you think that is?
23. What's happening with the program these days? Has participation been increasing, staying the same, or declining?

24. Going forward, what do you think can be done to increase customer participation?
  - What specifically can be done for the Basic track?
  - What specifically can be done for the Advanced track?
  - How can contractors increase jobs and homeowner engagement?
25. What do you think enrollment and retrofit numbers will look like over the next 6 months?
  - What makes you say this?
26. What are the top barriers to getting customers to participate in the first step of the program, i.e. the audit?
  - Are there any solutions that you would recommend to address these customer barriers?
  - How do they differ by track, if at all?
27. What are the top barriers to getting customers to take action after an audit?
  - Are there any solutions that you would recommend to address these customer barriers?
  - How do they differ by track, if at all?
28. Have there been any customer complaints with the program? If so, how were they resolved?

### **Collaboration with IOUs**

29. So far, how has the collaboration with SCE/PG&E gone? What have been the benefits and challenges to collaborating with SCE/PG&E?
  - [ASK IF BENEFITS] Please describe these benefits.
  - [ASK IF CHALLENGES] Please describe these challenges.
  - [ASK IF CHALLENGES] Can you think of any possible solutions to these challenges?

### **Alternate Funding Sources**

30. Have you received ARRA funding that is helping the EUC program? If so:
  - How much ARRA funding is allocated to the EUC program?
  - How are you using the ARRA funding? [PROBE FOR incentives; marketing, administrative costs, etc]
  - Will the ARRA funding end at the deadline of March, 2012?
    - If no, what percent of your ARRA funding will continue?
31. Do you have any other funding which you are dedicating to EUC? If yes – what is the source and the amount of that funding?

32. We've heard that some cities and counties have been offering limit time premium incentives to (probably via block grants) to participants. Have you offered any of these premium incentives? If so:
  - What were they, when were they offered and how much were they?
  - Have these been successful? If so, how? If not, why?
33. [PG&E only] Is your local government part of the Federal grant to ABAG (Association of Bay Area Governments) to fund energy efficiency?
34. What percentage of all your current funding will end effective March 2012?
35. Do you plan to continue your local government program in support of EUC after March 2012?
  - If yes, how do you plan to continue your support of the EUC after that date?
  - What will the funding sources and how much will each contribute on a yearly basis?
  - Will the program be scaled up (larger) or down (smaller)?

### Closing

36. Are there any other opportunities for program improvement that we haven't covered so far? If so, please describe.
37. Is there anything else about the program you feel is important for us to understand?

## 3. HOMEOWNER PARTICIPANT SURVEY

### 3.1. Survey Guide

#### Key to Question Origin

**S** – SCE Survey

**P** – PG&E Comments

**ME** –Marketing Effectiveness Survey

**PM** – Program manager interviews

**SE** - Segmentation

#### Screener

S1. Hello, my name is \*\*\* . I'm calling on behalf of [IF IOU IS PG&E INSERT "Pacific Gas and Electric; IF IOU IS SCE, INSERT "So Cal Edison" IOU], [ IF IOU IS PG&E AND GAS UTILITY IS PG&E OR IF IOU IS SCE INSERT "your electric and gas utility" IF IOU IS PG&E AND GAS UTILITY IS "Unknown" INSERT "your electric utility"], regarding your recent energy upgrade [IF PARTICIPANT NAME IS BLANK, "at [INSERT ADDRESS]"]. Is [INSERT PARTICIPANT NAME] available? [IF PARTICIPANT NAME IS BLANK, "Could I talk to the person who had the most experience with the Whole House program, also known as the Energy Upgrade California Program?"]

(IF RESPONDENT IS NOT AVAILABLE: When would be a good time to reach [INSERT NAME]? (IF PARTICIPANT NAME IS BLANK, "When would be a good time to reach the person who had the most experience with the program?))

(ONCE CORRECT PERSON IS ON THE PHONE :)

According to our records, you recently participated in a [INSERT IOU] program called the Whole House program, also known as the Energy Upgrade California Program, designed to help save energy in your home. [INSERT IOU] would like to hear from program participants about their experience in the program. We are offering you a [SCE = \$50, PG&E = \$100] incentive to give us as accurate feedback as possible. This survey will take about 20 minutes. Your answers will be kept confidential and will be used for evaluation purposes only. Are you willing to participate and provide us this important information? (SCHEDULE CALLBACK IF NECESSARY)

(IF NECESSARY "We will mail you a check so that it arrives in the next 2 to 3 weeks. We will confirm your address at the end of the survey.)

(NOTE TO INTERVIEWER: In a separate effort, another firm, KEMA, called several program participants asking to inspect their homes in exchange for incentives. If the respondent was

contacted by KEMA and brings this up, please say, “What I am calling about today is a separate study with a separate incentive.”)

Great. Let's get started. First...

**[ROTATE BLOCKS 1 AND 2]**

**BLOCK 1 (extends from HE3 to WH14)**

I have some specific questions about your experience with your home energy upgrades. In this survey, I'll refer to the Whole House Program or the Energy Upgrade California Program as “the Program”.

**How Participants Heard About Program**

**S** HE3. Where did you FIRST\_hear about the program? [IF NECESSARY: Use the short list below when survey participant needs assistance getting started.]

1. (Letter from [INSERT IOU])
2. (Email announcement)
3. (Family/Friend)
4. (The Energy Upgrade California Website)
5. (Newspaper advertisement)
6. (Contractor)
7. (Local Government and/or Local Energy Efficiency Rebate Program)
8. (Radio)
9. (Television)
10. (Transit/Bus)
11. (Billboard)
12. (Flyer or door hanger)
13. (City or County)
14. (Energy champion or ambassador)
15. (Neighborhood party)
00. (Other, please describe: \_\_\_\_\_)
98. (Don't Know)
99. (Refused)

**Website**

[SKIP IF HE3 =4]

**ME** W1. Have you ever visited the Energy Upgrade California website, located at [energyupgradeca.org](http://energyupgradeca.org)?

1. Yes
2. No
8. (Don't Know)
9. (Refused)

[ASK IF W1 = 1 OR IF HE3 =4]

**ME** W2. Considering the information that was available on the website, please rate your agreement with the following statements on a scale of 0 to 10, where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE A-E] [SCALE 0-10, 98=DK, 99=REF]

- a. The website gave me a good understanding of what the program offers.
- b. The information on the website was easy to understand.
- e. The website accurately reflected what I experienced with the program.

### Project Timing

Now, I have a few questions about the timing of the energy upgrades you completed at your home.

**ME** PT1. Which of the following best describes the home energy upgrades you completed?

1. The home energy upgrades were an extension of a home remodel project
2. The home energy upgrades were a stand-alone project
8. (Don't Know)
9. (Refused)

[ASK IF PT1=1]

**ME** PT2. Would you have considered the home energy upgrades if you were not already doing a home remodel project?

1. Yes
2. No
8. (Don't Know)
9. (Refused)

[ASK IF PT2=2]

PT2a. Can you please explain why not?

**ME** PT3. Which of the following best describes the type of home remodel you would have done without the program's incentives?

1. I would have done THE EXACT SAME home remodel project without the Energy Upgrade California program.
2. I would have done A SLIGHTLY DIFFERENT home remodel project without the Energy Upgrade California program.
3. I would NOT HAVE DONE the home remodel at all without the Energy Upgrade California program.
8. (Don't Know)
9. (Refused)

### Contractor(s)

Now, I have a few questions about the contractors you interacted with as part of the program.

**P** CO3. How many contractors did you consider, talk to, or meet with before starting your energy upgrade project? [NUMERIC OPEN END 0-50, 98=DK, 99=REF]

**S** CO5. How did you find the contractor for your energy upgrade project?

1. (It was a referral from a friend/neighbor.)
2. (I was contacted by the contractor.)
3. (I found the contractor from the Energy Upgrade California website)
4. (I found the contractor from the [INSERT IOU] website.)
5. (I found the contractor from yellow pages of a phone book.)
6. (I knew the contractor)
7. (A workshop/meeting I attended about the program)
00. (Other [RECORD VERBATIM])
98. (Don't Know)
99. (Refused)

[IF CO5=2]

**ME** CO2. How did the contractor you selected contact you? (MULTIPLE RESPONSE, PROBE WITH RESPONSE CATEGORIES IF NEEDED)

1. (Face-to-face discussion)
2. (Door hanger)
3. (A group talk or presentation)
4. (Telephoned me)
5. (As part of another project or service call)
00. (Other, please describe: \_\_\_\_\_)
98. (Don't Know)
99. (Refused)

**S** CO6. Now I'd like to ask about the contractor who did the home energy assessment at your home. On a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied, please rate the following areas: [SCALE 1-5, 8=DK, 9=REF]

- a. The contractor's explanation of the home energy assessment process
- b. The contractor's answers to your questions
- c. The contractor's level of knowledge about the work to be done
- d. The contractor's professionalism
- e. The contractor's knowledge of the rebates available
- f. The contractor's knowledge of financing options available to you

**S** CO7. Would you recommend this contractor to others?

1. Yes
2. No
8. (Don't Know)
9. (Refused)

## Assessment

Now, I have a few more questions about the home energy assessment.

**S AS3.** How did the contractor provide you with the results of your home's energy assessment? [MULT. REPSONSE, UP TO 3]

1. (A written report was handed/mailed/ emailed to me)
2. (I went online to get the results)
3. (Viewed on the contractor's laptop computer)
4. (The contractor discussed it with me in person)
5. (The contractor did not provide me with the results)
00. (Other [RECORD VERBATIM])
98. (Don't Know)
99. (Refused)

[ASK IF AS3 =1]

**S AS4.** On a scale of 1 to 5, with 1 being not at all comprehensive and 5 being very comprehensive, how comprehensive was the report? [SCALE 1-5, 8=DK, 9=REF]

[ASK IF AS3 =1]

AS4a. On a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied, how satisfied were you with the report? [SCALE 1-5, 8=DK, 9=REF]

AS4b. In regard to the home improvement recommendations provided to you after the home assessment, how many of the recommendations did you do?

1. All
2. Some
8. (Don't Know)
9. (Refused)

[ASK IF AS4B =2]

AS5. Why were some recommendations NOT completed? [OPEN END; UP TO THREE]

1. (Could not afford the rest of the work/ Ran out of money)
2. (Did not want to have that additional work/disruption in the home)
3. (Haven't had the time to follow-up or schedule the work)
4. (Am planning on completing some in the future)
5. (The contractor has not followed up.)
00. (Other [RECORD VERBATIM])
98. (Don't Know)
99. (Refused)

AS6. Did your contractor give you an estimate for how much money you might receive from [UTILITY] in program incentives?

1. Yes
2. No
8. (Don't Know)
9. (Refused)

[CONTINUE IF AS6=1, ELSE SKIP TO AS9]

[ASK IF SCE CUSTOMER]

AS7. Have you received your incentive payment from [UTILITY] yet?

1. Yes
2. No [SKIP TO NEXT SECTION]
8. (Don't Know) [SKIP TO NEXT SECTION]
9. (Refused) [SKIP TO NEXT SECTION]

AS8. How did the actual incentive amount you received from [UTILITY] compare to the contractors' estimate? Was the amount you received...

1. Lower than expected
2. Higher than expected
3. Roughly the same
8. (Don't Know)
9. (Refused)

AS9. Our records show that you received [AMOUNT] from [UTILITY] for your home energy upgrades. Did you also apply for incentives from organizations other than [UTILITY] for these home energy upgrades? [IF AMOUNT IS BLANK, INSERT "an incentive"]

1. Yes
2. No
8. (Don't Know)
9. (Refused)

[ASK IF AS9=1, ELSE SKIP TO AS11]

AS10. How much did you receive, or do you expect to receive, in additional incentives?

1. [ENTER DOLLAR AMOUNT]
8. (Don't Know)
9. (Refused)

[ASK IF AS9=2, 8, OR 9, ELSE SKIP TO MO5 if PGE, IF SCE SKIP TO A12]

AS11. Aside from the [INSERT UTILITY] incentives, were you aware of any other incentives or financing offered by other programs or sources for the home energy upgrades?

1. Yes
2. No
8. (Don't Know)
9. (Refused)

[ASK IF IOU=SCE]

AS12. I am going to list other programs you may have heard about from your contractor. For each, please tell me "yes" or "no". Did your contractor tell you about ... [INSERT A-G] [ROTATE] [1=YES, 2=NO , 8=DK, 9=REF]

- a. Additional incentives offered by your local government
- b. The Energy Champions Program
- c. The Green Label Rebate Program
- d. The Neighborhood Program
- e. The Multi-family Program
- f. Financing Options
- g. Home Energy Makeover Contest

#### **Motivation to Participate and Home Improvement Decision-making**

**S** MO5. How important were each of the following factors in motivating you to take actions to complete home energy upgrades through this program? On a scale of 1 to 5, with 1 being ‘Not at all important’, and 5 being ‘very important’, please rate the importance of each of the following factors: [ROTATE, SCALE 1-5, 8=don’t know, 9=refused]

- a. Reducing your energy usage
- P** b. Saving money on your energy bills
- c. Improving the comfort of your home
- d. Addressing health and safety issues in your home
- e. Improving the air quality in your home
- f. Reducing the environmental impact of your home
- g. Increasing the value of your home
- h. Replacing failing or broken equipment
- i. Incentives available from [UTILITY]
- j. The home energy assessment you received
- k. Incentives available from your city or county

MO6. Are there any other reasons for why you wanted to make home energy upgrades? [OPEN END; MULT RESPONSE UP TO 5; 96 = No other reasons 98=DK, 99=REF]

**ME** MO7. Please tell us whether any of the following happened before or during the time you made the home energy upgrades through the Program? [1=Yes, 2=No, 98=DK, 99=REFUSED] [ROTATE]

- a. Someone in your household recently retired
- b. Your home was recently purchased
- c. Your home was being prepared for sale
- d. A recent marriage or domestic partnership within the household
- e. A recent divorce or separation within the household
- f. Added a child to your household
- g. Expecting a child to your household
- h. The heating or air conditioner needed to be replaced

**ME** MO8. Was there anything else happening that may have contributed to your decision to make home energy improvements at the time you did?

00. Yes, please explain \_\_\_\_\_

96. No

- 98. (Don't Know)
- 99. (Refused)

M09. Beyond any incentives you may have received, how did you pay for the Energy Upgrade project? Did you [1=YES, 2=NO, 99=DON'T KNOW] [ROTATE]

- a. Use your own money
- b. Take out a loan
- c. Receive or apply for additional incentives from local governments or other agencies
- d. Use a credit card
- e. Pay for it some other way [SPECIFY]

### Satisfaction with Upgrades

Now, I have a few questions about the upgrades completed in your home and the contractor who completed them.

**S** US2. On a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied, how would you rate the overall quality of the EQUIPMENT installed by the contractor? [SCALE 1-5, 8=don't know, 9=refused]

**S** US3. On a scale of 1 to 5, with 1 being Very Dissatisfied and 5 being Very Satisfied, how would you rate the overall quality of the WORK performed by the contractor? [SCALE 1-5, 8=don't know, 9=refused]

### AKA-B

Now I am going to read you a few statements. For each one, please tell me your level of agreement on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree.' For some statements, there is a choice of "Not applicable" available. Please select this option if you have already taken these actions.

AK1. Completing a comprehensive package of modifications to my home, including sealing leaky windows and doors, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances will result in very deep savings. [SCALE 0-10, 98=DK, 99=REF]  
[ROTATE AK3-AK10]

AK3. I feel that it is my job to do as much as possible to my/our home to reduce energy use significantly. [SCALE 0-10, 98=DK, 99=REF]

AK5. Completing the full package of home modifications that includes sealing areas around windows and door, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances would significantly increase the comfort of a home. [SCALE 0-10, 96=NA, 98=DK, 99=REF]

AK6. I was concerned enough about the environmental impacts of energy use that I completed a comprehensive package of home modifications to help. [SCALE 0-10, 96=NA, 98=DK, 99=REF]

AK7. My/our home had problems with drafts and cold or hot spots that I/we addressed with our recent energy upgrade. [SCALE 0-10, 96=NA, 98=DK, 99=REF]

AK8. I would feel a little guilty about harming the environment if I didn't do all I could to my home to make it energy efficient. [SCALE 0-10, 98=DK, 99=REF]

AK9. I'm really not sure that my home needs to be as energy efficient as possible. [SCALE 0-10, 98=DK, 99=REF]

AK10. I wasn't sure whether my home was energy efficient or not. [SCALE 0-10, 96=NA 98=DK, 99=REF]

### Satisfaction with the Inspection Process

**PM** IP1. Was your home inspected by someone from the program at any point?

1. Yes
2. No [SKIP TO NEXT SECTION]
8. (Don't Know) [SKIP TO NEXT SECTION]
9. (Refused) [SKIP TO NEXT SECTION]

**PM** IP2. On a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied, how satisfied were you will the inspection process? [SCALE 1-5, 8=DK, 9=REF]  
[ASK IF IP2 <4]

**PM** IP3. Please explain why you gave that rating? [OPEN END]

### Satisfaction with the Whole House Program

**ME** WH1. What do you think are the main benefits of participating in the Energy Upgrade California program? [OPEN END]

1. (Rebates or incentives)
2. (Saving money on utility bills)
3. (Saving energy)
4. (Better for the environment)
5. (Increased comfort)
6. (Better health/air quality in the home)
00. (Other: specify\_\_\_\_\_)
98. DK
99. REF

**S** WH2. As a result of participating in the Energy Upgrade California Program, did you gain any energy-related knowledge that you didn't have before?

1. Yes
2. No
8. (Don't Know)

9. (Refused)

[ASK IF WH2=1]

**S** WH3. What did you learn? [IF NECESSARY: Use the short list below when survey participant needs assistance getting started.] [OPEN END; MULT RESPONSE UP TO 5; 98=DK, 99=REF]

1. (More aware of the benefits of treating the whole house as an energy system)
2. (More aware of the importance of using high energy efficiency appliances)
3. (Reminded me of various ways to save energy)
00. (Other: specify\_\_\_\_\_)
98. Don't Know
99. Refused

**S** WH4. Do you know how much your energy usage should decrease as a result of the energy upgrade project?

1. Yes
2. No
8. (Don't Know)
9. (Refused)

WH4a. Are you managing energy use in your home differently – now that you are completed with your energy upgrade?

1. Yes
2. No
8. (Don't Know)
9. (Refused)

[IF WH4a=1]

W4b. Can you please explain how?

1. (Operate at a lower temperature for heating)
2. (Operate at a higher temperature for cooling)
3. (Use more natural ventilation)
4. (Just set the temperature and leave it – it keeps the house comfortable)
00. (Other, specify \_\_\_\_\_)
8. (Don't Know)
9. (Refused)

**PM** WH5. Do you think that your utility bills are now higher, lower or the same, as what they would have been if the upgrades had not been completed?

1. Higher
2. Lower
3. The same
4. (Too early to tell)
8. (Don't Know)
9. (Refused)

**S** WH6. Using a scale of 1 to 5 with 1 being very dissatisfied and 5 being very satisfied, how satisfied have you been with the Energy Upgrade Program as a whole? [SCALE 1-5, 8=don't know, 9=refused]

[SKIP IF DK REF]

WH7. Please explain why you gave the program that rating? [OPEN END]

**S** WH10. From your perspective, how can the program be improved? [OPEN END; MULT RESPONSE UP TO 5; 96=NONE, 98=DK, 99=REF]

**PM** WH11. Have you talked to friends and family about the program?

1. Yes
2. No
8. (Don't Know)
9. (Refused)

[ASK IF WH11=1]

**PM** WH12. What did you tell them? [OPEN END; MULT RESPONSE UP TO 3; 96=Nothing, 98=DK, 99=REF]

[ASK IF WH11=2]

**PM** WH13. If you were to talk to friends or family about the program, what would you tell them about it? [OPEN END; MULT RESPONSE UP TO 3; 96=Nothing, 98=DK, 99=REF]

**PM** WH14. Would you recommend this program to friends and family?

1. Yes
2. No
8. (Don't Know)
9. (Refused)

Now...

## BLOCK 2 (Extends from SE1 through SE7)

### AKA-Segmentation

I am going to ask you a few questions about energy-related issues and about energy-saving actions you may have done in your home.

**SE** SE3. Have you heard of a carbon footprint? [IF NECESSARY: A carbon footprint is a measure of the energy you use throughout your life, either directly or indirectly. This includes but is not limited to the energy consumption from your home, your transportation, your diet, and your purchases].

1. Yes
2. No
8. (Don't Know)

9. (Refused)

**SE SE4.** Now, I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means Completely agree, please tell me how much you agree with each statement. [ROTATE A-I] [SCALE 0-10, 98=DK, 99=REF]

- b. I often worry that the cost of energy for my home will increase.
- c. I am very concerned about how energy use affects the environment.
- e. I feel guilty if I use too much energy.
- f. I intend to conserve on gas or electricity consumption in my home this winter.
- g. I intend to conserve on electricity consumption in my home this summer.
- i. I have to take the lead in my household if we're going to keep our utility bills down.

**SE SE5.** Next, I'm going to read a list of energy-saving actions. For each action, please tell me if your household has already taken the action. Did you...? [ROTATE] [1=Yes, 2=No, 3= (Came with the house), 98=DK, 99=REFUSED]

- a. install an attic vent to keep the attic cooler
- b. install programmable thermostats
- c. install ceiling fans
- d. install motion detectors for lights

**SE SE6.** On a scale of 1 to 7 where 1 is Strongly Disagree and 7 is Strongly Agree, please tell me how much you agree or disagree with the following statement. [SCALE 1-7, 98=DK, 99=REF]

- a. I compare prices of at least a few brands before I choose one.

**SE SE7.** I'm going to read you a list of six reasons why people might change their daily actions to save energy. Please tell me which of these would motivate you the MOST to save energy? [READ CHOICES] [ROTATE] [IF DK, PROBE “if you had to choose from the following reasons which one would motivate you the most”]

- 1. Saving money
- 2. Maintaining Health
- 3. Protecting the environment
- 4. For the benefit of future generations
- 5. Reducing our dependence on foreign oil
- 6. Helping California lead the way on saving energy
- 8. (Don't know)
- 9. (Refused)

Now...

**BLOCK 3 (Extends from D1 through closing; always occurs last)**

**Demographics**

I just have a few more questions left.

**ME** D1. How many people currently live in your household year-round (more than nine months out of the year), including yourself? [NUMERIC OPEN END, 99 Refused]

**[SKIP IF D1=1]**

**ME** D2. How many children 18 and younger currently live in your household year-round (more than nine months out of the year)? [NUMERIC OPEN END, 99 Refused]

**ME** D3. Which of the following best represents your annual household income from all sources in 2011, before taxes? Was it ...

1. Under \$25,000
2. \$25,000 to under \$35,000
3. \$35,000 to under \$50,000
4. \$50,000 to under \$75,000
5. \$75,000 to under \$100,000
6. \$100,000 to \$150,000
7. Over \$150,000
9. (Refused)

**ME** D4. What is the last grade of school you completed?

1. Less than high school
2. High school graduate
3. Some collage/Vocational or technical school
4. College graduate
5. Post graduate education
9. (Refused)

**ME** D5. In what year were you born? [NUMERIC OPEN END; 1900-1999]

9999. (Refused)

**ME** D6. Which of the following best describes your race or ethnicity?

1. White or Caucasian
2. Black or African American
3. American Indian or Alaska Native
4. Hispanic, Mexican, Latino, Puerto Rican, or other Hispanic
5. Chinese
6. Indian or South Asian
7. Other Asian or Pacific Islander
8. Mixed or multi-racial
00. Another group, please list: \_\_\_\_\_
99. (Refused)

**ME** D8. In what year was your home built?

1. 2008 to 2012
2. 2001 to 2007

3. 1991 to 2000
4. 1981 to 1990
5. 1971 to 1980
6. 1961 to 1970
7. 1951 to 1960
8. 1941 to 1950
9. 1940 or earlier
99. (Refused)

**ME** D9. How long have you owned this home?

1. Less than 5 years
2. 6-10 years
3. 11-15 years
4. 16-20 years
5. 21-25 years
6. 26-30 years
7. More than 30 years
9. (Refused)

D10. How much longer do you intend to live in this home?

1. (Less than 5 years)
2. (6-10 years)
3. (11-15 years)
4. (16-20 years)
5. (More than 20 years)
6. (Don't Know)
7. (Refused)

### Closing

That is all of the questions I have for you today.

I just need to confirm your name and address so that we may send you the [IF PG&E = \$100, IF SCE = \$50] incentive in appreciation for your time today? [CONFIRM AND COLLECT NAME, AND ADDRESS, CITY, ZIP]

A check will arrive within 2 to 3 weeks.

Thank you very much for your time.

## 3.2. Survey Frequency Tabulations

Throughout this topline report, 16 SCE customers and 62 PG&E customers answered each question. We include a different number in the data tables in cases where the total number of respondents is different from the total survey population for a given question.

### How Participants Heard About Program

**S HE3. Where did you FIRST hear about the program? [IF NECESSARY: Use the short list below when survey participant needs assistance getting started.]**

	UTIL		Total
	PG&E	SCE	
Letter from (UTILITY)	4.80%	25.00%	9.00%
Family/Friend	16.10%	12.50%	15.40%
The Energy Upgrade California Website	1.60%	0.00%	1.30%
Newspaper advertisement	4.80%	6.30%	5.10%
Contractor	33.90%	25.00%	32.10%
Radio	3.20%	12.50%	5.10%
Television	3.20%	0.00%	2.60%
Transit/Bus	1.60%	0.00%	1.30%
Flyer or door hanger	1.60%	0.00%	1.30%
City or County	1.60%	0.00%	1.30%
Energy champion or ambassador	1.60%	0.00%	1.30%
(Neighborhood party)	3.20%	0.00%	2.60%
Mail (unspecified)	4.80%	0.00%	3.80%
Mortgage lender/loan officer/real estate agent/bank	11.30%	0.00%	9.00%
Online	4.80%	6.30%	5.10%
(Other)	1.60%	12.50%	3.80%
Total	100.00%	100.00%	100.00%

### Website

[SKIP IF HE3 =4]

**ME W1. Have you ever visited the Energy Upgrade California website, located at energyupgradeca.org?**

	UTIL		Total n=77
	PG&E n=61	SCE n=16	
Yes	49.20%	56.30%	50.60%
No	47.50%	43.80%	46.80%
(Don't Know)	3.30%	0.00%	2.60%
Total	100.00%	100.00%	100.00%

[ASK IF W1 = 1 OR IF HE3 =4]

**ME W2.** Considering the information that was available on the website, please rate your agreement with the following statements on a scale of 0 to 10, where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE A-E] [SCALE 0-10, 98=DK, 99=REF]

**ME W2A.** The website gave me a good understanding of what the program offers.

	UTIL		Total n=40
	PG&E n=31	SCE n=9	
4	0.00%	11.10%	2.50%
5	16.10%	0.00%	12.50%
6	6.50%	11.10%	7.50%
7	6.50%	11.10%	7.50%
8	16.10%	0.00%	12.50%
9	19.40%	33.30%	22.50%
10 - Strongly agree	32.30%	33.30%	32.50%
(Don't know)	3.20%	0.00%	2.50%
Total	100.00%	100.00%	100.00%

**ME W2B.** The information on the website was easy to understand.

	UTIL		Total n=40
	PG&E n=31	SCE n=9	
3	0.00%	11.10%	2.50%
	12.90%	0.00%	10.00%
6	0.00%	11.10%	2.50%
7	9.70%	22.20%	12.50%
8	19.40%	11.10%	17.50%

9	19.40%	22.20%	20.00%
10 - Strongly agree	38.70%	22.20%	35.00%
Total	100.00%	100.00%	100.00%

**ME W2C.** The website accurately reflected what I experienced with the program.

	UTIL		Total n=40
	PG&E n=31	SCE n=9	
1	0.00%	11.10%	2.50%
3	0.00%	11.10%	2.50%
5	19.40%	0.00%	15.00%
6	3.20%	0.00%	2.50%
7	12.90%	22.20%	15.00%
8	9.70%	11.10%	10.00%
9	16.10%	11.10%	15.00%
10 - Strongly agree	38.70%	22.20%	35.00%
(Don't know)	0.00%	11.10%	2.50%
Total	100.00%	100.00%	100.00%

### Project Timing

Now, I have a few questions about the timing of the energy upgrades you completed at your home.

**ME PT1.** Which of the following best describes the home energy upgrades you completed?

	UTIL		Total
	PG&E	SCE	
The home energy upgrades were an extension of a home remodel project	9.70%	12.50%	10.30%
The home energy upgrades were a stand-alone project	90.30%	87.50%	89.70%
Total	100.00%	100.00%	100.00%

[ASK IF PT1=1]

**ME PT2.** Would you have considered the home energy upgrades if you were not already doing a home remodel project?

	UTIL		Total n=8
	PG&E n=6	SCE n=2	
Yes	50.00%	100.00%	62.50%
No	50.00%	0.00%	37.50%
	100.00%	100.00%	100.00%

[ASK IF PT2=2]

PT2a. Can you please explain why not?

	UTIL	Total n=3
	PG&E n=3	
Too expensive (outside the program)/Included in the home mortgage	66.70%	66.70%
(Other)	33.30%	33.30%
	100.00%	100.00%

**ME PT3.** Which of the following best describes the type of home remodel you would have done without the program's incentives?

	UTIL		Total
	PG&E	SCE	
I would have done THE EXACT SAME home remodel project without the Energy Upgrade California program.	21.00%	12.50%	19.20%
I would have done A SLIGHTLY DIFFERENT home remodel project without the Energy Upgrade California program.	38.70%	37.50%	38.50%
I would NOT HAVE DONE the home remodel at all without the Energy Upgrade California program.	35.50%	43.80%	37.20%
(Don't Know)	4.80%	6.30%	5.10%
Total	100.00%	100.00%	100.00%

### Contractor(s)

Now, I have a few questions about the contractors you interacted with as part of the program.

P CO3. How many contractors did you consider, talk to, or meet with before starting your energy upgrade project? [NUMERIC OPEN END 0-50, 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
1	53.20%	31.30%	48.70%
2	12.90%	37.50%	17.90%
3	21.00%	12.50%	19.20%
4	9.70%	6.30%	9.00%
5	1.60%	6.30%	2.60%
6	1.60%	0.00%	1.30%
10	0.00%	6.30%	1.30%
Total	100.00%	100.00%	100.00%

S CO5. How did you find the contractor for your energy upgrade project?

	UTIL		Total
	PG&E	SCE	
(It was a referral from a friend/neighbor.)	29.00%	18.80%	26.90%
(I was contacted by the contractor.)	6.50%	0.00%	5.10%
(I found the contractor from the Energy Upgrade California website)	12.90%	31.30%	16.70%
(I found the contractor from the (UTILITY) website.)	4.80%	0.00%	3.80%
(I found the contractor from yellow pages of a phone book.)	3.20%	6.30%	3.80%
(I knew the contractor)	4.80%	6.30%	5.10%
(A workshop/meeting I attended about the program)	1.60%	6.30%	2.60%
Angie's list	3.20%	0.00%	2.60%
Internet/other website	9.70%	0.00%	7.70%
Newspaper/magazine/other print media	4.80%	0.00%	3.80%
TV/radio	1.60%	0.00%	1.30%
Mortgage lender/loan officer/real estate agent/bank	11.30%	0.00%	9.00%
Through the program/other party involved in the project	8.10%	12.50%	9.00%
Flyer/mailers	9.70%	6.30%	9.00%
(Other)	3.20%	18.80%	6.40%

Total	79.50%	20.50%	100.00%
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[IF CO5=2]

**ME CO2.** How did the contractor you selected contact you? (MULTIPLE RESPONSE, PROBE WITH RESPONSE CATEGORIES IF NEEDED)

	UTIL	Total
	PG&E n=3	
Mailer	66.70%	66.70%
(Other)	33.30%	33.30%
Total	100.00%	100.00%

**S CO6.** Now I'd like to ask about the contractor who did the home energy assessment at your home. On a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied, please rate the following areas: [SCALE 1-5, 8=DK, 9=REF]

**S CO6A.** The contractor's explanation of the home energy assessment process

	UTIL		Total
	PG&E	SCE	
2	3.20%	6.30%	3.80%
3	3.20%	0.00%	2.60%
4	27.40%	18.80%	25.60%
5 - Very satisfied	66.10%	75.00%	67.90%
Total	100.00%	100.00%	100.00%

**S CO6B.** The contractor's answers to your questions

	UTIL		Total
	PG&E	SCE	
2	3.20%	6.30%	3.80%
3	8.10%	0.00%	6.40%
4	29.00%	18.80%	26.90%
5 - Very satisfied	59.70%	75.00%	62.80%
Total	100.00%	100.00%	100.00%

**S CO6C. The contractor's level of knowledge about the work to be done**

	UTIL		Total
	PG&E	SCE	
1 - Very dissatisfied	0.00%	6.30%	1.30%
2	1.60%	0.00%	1.30%
3	6.50%	18.80%	9.00%
4	22.60%	6.30%	19.20%
5 - Very satisfied	69.40%	68.80%	69.20%
Total	100.00%	100.00%	100.00%

**S CO6D. The contractor's professionalism**

	UTIL		Total
	PG&E	SCE	
1 - Very dissatisfied	1.60%	6.30%	2.60%
2	3.20%	0.00%	2.60%
3	3.20%	6.30%	3.80%
4	24.20%	37.50%	26.90%
5 - Very satisfied	67.70%	50.00%	64.10%
Total	100.00%	100.00%	100.00%

**S CO6E. The contractor's knowledge of the rebates available**

	UTIL		Total
	PG&E	SCE	
1 - Very dissatisfied	1.60%	0.00%	1.30%
2	4.80%	0.00%	3.80%
3	4.80%	18.80%	7.70%
4	21.00%	25.00%	21.80%
5 - Very satisfied	67.70%	50.00%	64.10%

(Don't know)	0.00%	6.30%	1.30%
Total	100.00%	100.00%	100.00%

**S CO6F.** The contractor's knowledge of financing options available to you

	UTIL		Total
	PG&E	SCE	
1 - Very dissatisfied	4.80%	6.30%	5.10%
2	3.20%	12.50%	5.10%
3	8.10%	0.00%	6.40%
4	14.50%	6.30%	12.80%
5 - Very satisfied	43.50%	37.50%	42.30%
(Don't know)	21.00%	31.30%	23.10%
(Refused)	4.80%	6.30%	5.10%
Total	100.00%	100.00%	100.00%

**S CO7.** Would you recommend this contractor to others?

	UTIL		Total
	PG&E	SCE	
Yes	90.30%	87.50%	89.70%
No	6.50%	12.50%	7.70%
(Don't Know)	3.20%	0.00%	2.60%
Total	100.00%	100.00%	100.00%

## Assessment

Now, I have a few more questions about the home energy assessment.

**S AS3.** How did the contractor provide you with the results of your home's energy assessment?  
[MULT. REPSONSE, UP TO 3]

	UTIL		Total
	PG&E	SCE	
(A written report was	71.00%	62.50%	69.20%

handed/mailed/mailed to me)			
(Viewed on the contractor's laptop computer)	1.60%	0.00%	1.30%
(The contractor discussed it with me in person)	45.20%	56.30%	47.40%
(The contractor did not provide me with the results)	3.20%	6.30%	3.80%
The contractor discussed it with me over the phone	3.20%	0.00%	2.60%
(Don't know)	1.60%	0.00%	1.30%
Total	79.50%	20.50%	100.00%

[ASK IF AS3 =1]

S AS4. On a scale of 1 to 5, with 1 being not at all comprehensive and 5 being very comprehensive, how comprehensive was the report? [SCALE 1-5, 8=DK, 9=REF]

	UTIL		Total n=53
	PG&E n=43	SCE n=10	
1 - Not at all comprehensive	2.30%	0.00%	1.90%
2	2.30%	0.00%	1.90%
3	7.00%	0.00%	5.70%
4	30.20%	30.00%	30.20%
5 - Very comprehensive	53.50%	50.00%	52.80%
(Don't know)	2.30%	20.00%	5.70%
(Refused)	2.30%	0.00%	1.90%
Total	100.00%	100.00%	100.00%

[ASK IF AS3 =1]

AS4a. On a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied, how satisfied were you with the report? [SCALE 1-5, 8=DK, 9=REF]

	UTIL		Total n=53
	PG&E n=43	SCE n=10	
2	2.30%	0.00%	1.90%
3	4.70%	0.00%	3.80%
4	25.60%	40.00%	28.30%
5 - Very satisfied	65.10%	50.00%	62.30%

(Don't know)	2.30%	0.00%	1.90%
(Refused)	0.00%	10.00%	1.90%
Total	100.00%	100.00%	100.00%

AS4b. In regard to the home improvement recommendations provided to you after the home assessment, how many of the recommendations did you do?

	UTIL		Total
	PG&E	SCE	
All	56.50%	50.00%	55.10%
Some	35.50%	43.80%	37.20%
(Don't Know)	4.80%	6.30%	5.10%
(Refused)	3.20%	0.00%	2.60%
Total	100.00%	100.00%	100.00%

[ASK IF AS4B =2]

AS5. Why were some recommendations NOT completed? [OPEN END; UP TO THREE]

	UTIL		Total n=29
	PG&E n=22	SCE n=7	
(Could not afford the rest of the work/ Ran out of money)	59.10%	71.40%	62.10%
(Did not want to have that additional work/disruption in the home)	0.00%	14.30%	3.40%
(Haven't had the time to follow-up or schedule the work)	4.50%	0.00%	3.40%
(Am planning on completing some in the future)	9.10%	0.00%	6.90%
They were relatively unimportant/not effective for savings	18.20%	14.30%	17.20%
They were unnecessary	22.70%	14.30%	20.70%
They were not covered by the rebate	4.50%	14.30%	6.90%
(Don't know)	4.50%	0.00%	3.40%
Total	75.90%	24.10%	100.00%

AS6. Did your contractor give you an estimate for how much money you might receive from [UTILITY] in program incentives?

	UTIL		Total
	PG&E	SCE	
Yes	62	16	78
Total	100.00%	100.00%	100.00%

[CONTINUE IF AS6=1, ELSE SKIP TO AS9]

[ASK IF SCE CUSTOMER]

AS7. Have you received your incentive payment from [UTILITY] yet?

	UTIL		Total n=16
	SCE n=16		
Yes	68.80%		68.80%
No	31.30%		31.30%
Total	100.00%		100.00%

AS8. How did the actual incentive amount you received from [UTILITY] compare to the contractors' estimate? Was the amount you received...

	UTIL		Total n=73
	PG&E n=62	SCE n=11	
Lower than expected	9.70%	27.30%	12.30%
Higher than expected	11.30%	9.10%	11.00%
Roughly the same	77.40%	54.50%	74.00%
(Don't Know)	1.60%	9.10%	2.70%
Total	100.00%	100.00%	100.00%

AS9. Our records show that you received [AMOUNT] from [UTILITY] for your home energy upgrades. Did you also apply for incentives from organizations other than [UTILITY] for these home energy upgrades? [IF AMOUNT IS BLANK, INSERT “an incentive”]

	UTIL		Total n=73
	PG&E n=62	SCE n=11	
Yes	54.80%	100.00%	61.60%
No	41.90%	0.00%	35.60%

(Don't Know)	3.20%	0.00%	2.70%
Total	100.00%	100.00%	100.00%

[ASK IF AS9=1, ELSE SKIP TO AS11]

AS10. How much did you receive, or do you expect to receive, in additional incentives?

	UTIL		Total n=45
	PG&E n=34	SCE n=11	
\$ 200	5.90%	0.00%	4.40%
\$ 250	2.90%	0.00%	2.20%
\$ 500	2.90%	0.00%	2.20%
\$ 1,500	5.90%	18.20%	8.90%
\$ 2,000	14.70%	18.20%	15.60%
\$ 2,100	2.90%	0.00%	2.20%
\$ 2,300	8.80%	0.00%	6.70%
\$ 2,500	2.90%	9.10%	4.40%
\$ 3,000	2.90%	0.00%	2.20%
\$ 3,500	2.90%	18.20%	6.70%
\$ 4,000	14.70%	18.20%	15.60%
\$ 5,000	8.80%	0.00%	6.70%
\$ 5,500	2.90%	0.00%	2.20%
\$ 6,300	2.90%	0.00%	2.20%
\$ 7,000	5.90%	0.00%	4.40%
\$ 7,300	2.90%	0.00%	2.20%
(Don't know)	8.80%	18.20%	11.10%
Total	100.00%	100.00%	100.00%

[ASK IF AS9=2, 8, OR 9, ELSE SKIP TO MO5 if PGE, IF SCE SKIP TO A12]

AS11. Aside from the [INSERT UTILITY] incentives, were you aware of any other incentives or financing offered by other programs or sources for the home energy upgrades?

	UTIL		Total n=28
	PG&E n=28		

Yes	39.30%	39.30%
No	57.10%	57.10%
(Don't Know)	3.60%	3.60%
Total	100.00%	100.00%

[ASK IF IOU=SCE]

AS12. I am going to list other programs you may have heard about from your contractor. For each, please tell me “yes” or “no”. Did your contractor tell you about ... [INSERT A-G] [ROTATE]  
[1=YES, 2=NO , 8=DK, 9=REF]

AS12A. Additional incentives offered by your local government

	UTIL	Total n=11
	SCE n=11	
Yes	72.70%	72.70%
No	27.30%	27.30%
Total	100.00%	100.00%

AS12B. The Energy Champions Program

	UTIL	Total n=11
	SCE n=11	
Yes	9.10%	9.10%
No	90.90%	90.90%
Total	100.00%	100.00%

AS12C. The Green Label Rebate Program

	UTIL	Total n=11
	SCE n=11	
Yes	27.30%	27.30%
No	72.70%	72.70%
Total	100.00%	100.00%

AS12D. The Neighborhood Program

	UTIL	Total n=11
	SCE n=11	

Yes	9.10%	9.10%
No	81.80%	81.80%
(Don't Know)	9.10%	9.10%
Total	100.00%	100.00%

#### AS12E. The Multi-family Program

	UTIL	Total n=11
	SCE	
No	100.00%	100.00%
Total	100.00%	100.00%

#### AS12F. Financing Options

	UTIL	Total n=11
	SCE	
Yes	5	5
Yes	45.50%	45.50%
No	54.50%	54.50%
Total	100.00%	100.00%

#### AS12G. Home Energy Makeover Contest

	UTIL	Total n=11
	SCE	
Yes	18.20%	18.20%
No	72.70%	72.70%
(Don't Know)	9.10%	9.10%
Total	100.00%	100.00%

#### Motivation to Participate and Home Improvement Decision-making

**S MO5.** How important were each of the following factors in motivating you to take actions to complete home energy upgrades through this program? On a scale of 1 to 5, with 1 being ‘Not at all important’, and 5 being ‘very important’, please rate the importance of each of the following factors: [ROTATE, SCALE 1-5, 8=don’t know, 9=refused]

**S MO5A.** Reducing your energy usage

	UTIL		Total
	PG&E	SCE	
2	0.00%	6.30%	1.30%
3	8.10%	0.00%	6.40%
4	21.00%	18.80%	20.50%
5 - Very important	71.00%	75.00%	71.80%
Total	100.00%	100.00%	100.00%

#### S MO5PB. Saving money on your energy bills

	UTIL		Total
	PG&E	SCE	
2	1.60%	6.30%	2.60%
3	14.50%	0.00%	11.50%
4	19.40%	31.30%	21.80%
5 - Very important	64.50%	62.50%	64.10%
Total	100.00%	100.00%	100.00%

#### S MO5C. Improving the comfort of your home

	UTIL		Total
	PG&E	SCE	
1 - Not at all important	1.60%	6.30%	2.60%
3	3.20%	0.00%	2.60%
4	17.70%	18.80%	17.90%
5 - Very important	77.40%	75.00%	76.90%
Total	100.00%	100.00%	100.00%

#### S MO5D. Addressing health and safety issues in your home

	UTIL		Total
	PG&E	SCE	
1 - Not at all important	9.70%	6.30%	9.00%

2	6.50%	6.30%	6.40%
3	14.50%	18.80%	15.40%
4	16.10%	12.50%	15.40%
5 - Very important	50.00%	56.30%	51.30%
(Don't know)	3.20%	0.00%	2.60%
Total	100.00%	100.00%	100.00%

#### S MO5E. Improving the air quality in your home

	UTIL		Total
	PG&E	SCE	
1 - Not at all important	8.10%	12.50%	9.00%
2	6.50%	12.50%	7.70%
3	16.10%	18.80%	16.70%
4	14.50%	18.80%	15.40%
5 - Very important	53.20%	37.50%	50.00%
(Don't know)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

#### S MO5F. Reducing the environmental impact of your home

	UTIL		Total
	PG&E	SCE	
1 - Not at all important	4.80%	6.30%	5.10%
2	4.80%	12.50%	6.40%
3	17.70%	0.00%	14.10%
4	30.60%	25.00%	29.50%
5 - Very important	40.30%	56.30%	43.60%
(Don't know)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

#### S MO5G. Increasing the value of your home

	UTIL		Total
	PG&E	SCE	
1 - Not at all important	3.20%	18.80%	6.40%
2	11.30%	12.50%	11.50%
3	32.30%	6.30%	26.90%
4	22.60%	31.30%	24.40%
5 - Very important	30.60%	31.30%	30.80%
Total	100.00%	100.00%	100.00%

#### S MO5H. Replacing failing or broken equipment

	UTIL		Total
	PG&E	SCE	
1 - Not at all important	9.70%	12.50%	10.30%
2	4.80%	6.30%	5.10%
3	12.90%	6.30%	11.50%
4	17.70%	12.50%	16.70%
5 - Very important	54.80%	62.50%	56.40%
Total	100.00%	100.00%	100.00%

#### S MO5I. Incentives available from [UTILITY]

	UTIL		Total
	PG&E	SCE	
3	8.10%	6.30%	7.70%
4	27.40%	18.80%	25.60%
5 - Very important	64.50%	75.00%	66.70%
Total	100.00%	100.00%	100.00%

#### S MO5J. The home energy assessment you received

	UTIL		Total
	PG&E	SCE	
1 - Not at all important	1.60%	6.30%	2.60%
2	1.60%	12.50%	3.80%
3	8.10%	18.80%	10.30%
4	40.30%	12.50%	34.60%
5 - Very important	45.20%	43.80%	44.90%
(Don't know)	3.20%	6.30%	3.80%
Total	100.00%	100.00%	100.00%

**S MO5K. Incentives available from your city or county**

	UTIL		Total
	PG&E	SCE	
1 - Not at all important	3.20%	6.30%	3.80%
2	6.50%	6.30%	6.40%
3	17.70%	0.00%	14.10%
4	19.40%	12.50%	17.90%
5 - Very important	46.80%	68.80%	51.30%
(Don't know)	6.50%	6.30%	6.40%
Total	100.00%	100.00%	100.00%

MO6. Are there any other reasons for why you wanted to make home energy upgrades? [OPEN END; MULT RESPONSE UP TO 5; 96 = No other reasons 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
Reducing my home energy usage	11.30%	6.30%	10.30%
Saving money on my energy bill	6.50%	12.50%	7.70%
Improving the comfort of my home	8.10%	25.00%	11.50%
Addressing health/safety issues in my home	3.20%	6.30%	3.80%
Improving the air quality in my home	1.60%	6.30%	2.60%

Reducing the environmental impact of my home	6.50%	6.30%	6.40%
Increasing the value of my home	1.60%	0.00%	1.30%
Replacing failing or broken equipment	8.10%	0.00%	6.40%
Incentives available from <UTIL>	1.60%	6.30%	2.60%
Incentives available from local government	1.60%	0.00%	1.30%
(No other reasons)	72.60%	50.00%	67.90%
(Other)	3.20%	0.00%	2.60%
Total	79.50%	20.50%	100.00%

**ME MO7.** Please tell us whether any of the following happened before or during the time you made the home energy upgrades through the Program? [1=Yes, 2=No, 98=DK, 99=REFUSED] [ROTATE]

**ME MO7A.** Someone in your household recently retired

	UTIL		Total
	PG&E	SCE	
Yes	19.40%	0.00%	15.40%
No	80.60%	100.00%	84.60%
Total	100.00%	100.00%	100.00%

**ME MO7B.** Your home was recently purchased

	UTIL		Total
	PG&E	SCE	
Yes	32.30%	12.50%	28.20%
No	67.70%	87.50%	71.80%
Total	100.00%	100.00%	100.00%

**ME MO7C.** Your home was being prepared for sale

	UTIL		Total
	PG&E	SCE	
No	100.00%	100.00%	100.00%
Total	100.00%	100.00%	100.00%

**ME MO7D.** A recent marriage or domestic partnership within the household

	UTIL		Total
	PG&E	SCE	
Yes	4.80%	12.50%	6.40%
No	95.20%	87.50%	93.60%
Total	100.00%	100.00%	100.00%

**ME MO7E.** A recent divorce or separation within the household

	UTIL		Total
	PG&E	SCE	
Yes	3.20%	0.00%	2.60%
No	96.80%	100.00%	97.40%
Total	100.00%	100.00%	100.00%

**ME MO7F.** Added a child to your household

	UTIL		Total
	PG&E	SCE	
Yes	9.70%	6.30%	9.00%
No	90.30%	93.80%	91.00%
Total	100.00%	100.00%	100.00%

**ME MO7G.** Expecting a child to your household

	UTIL		Total
	PG&E	SCE	
Yes	8.10%	0.00%	6.40%
No	91.90%	100.00%	93.60%
Total	100.00%	100.00%	100.00%

**ME MO7H.** The heating or air conditioner needed to be replaced

	UTIL		Total
	PG&E	SCE	
Yes	43.50%	31.30%	41.00%
No	54.80%	68.80%	57.70%
(Don't Know)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

**ME MO8.** Was there anything else happening that may have contributed to your decision to make home energy improvements at the time you did?

	UTIL		Total
	PG&E	SCE	
High energy bills/rate increase	9.70%	18.80%	11.50%
Uncomfortable/issue causing discomfort in the home (i.e cold)	9.70%	12.50%	10.30%
Issue relating to health/illness	8.10%	6.30%	7.70%
Already remodeling/doing home improvements	3.20%	0.00%	2.60%
Broken/failing/old equipment needed to be replaced	6.50%	12.50%	7.70%
Moved/moving	3.20%	0.00%	2.60%
Losing energy/wanted to become efficient	3.20%	0.00%	2.60%
Found out about rebates/saved enough to afford it	3.20%	0.00%	2.60%
No	61.30%	56.30%	60.30%
(Other)	1.60%	0.00%	1.30%
(Don't Know)	1.60%	0.00%	1.30%
Total	79.50%	20.50%	100.00%

**M09.** Beyond any incentives you may have received, how did you pay for the Energy Upgrade project? Did you [1=YES, 2=NO, 99=DON'T KNOW] [ROTATE]

**M09A.** Use your own money

	UTIL		Total
	PG&E	SCE	
Yes	74.20%	87.50%	76.90%
No	25.80%	12.50%	23.10%
Total	100.00%	100.00%	100.00%

**M09B.** Take out a loan

	UTIL		Total
	PG&E	SCE	
Yes	41.90%	50.00%	43.60%
No	56.50%	50.00%	55.10%
(Don't Know)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

M09C. Receive or apply for additional incentives from local governments or other agencies

	UTIL		Total
	PG&E	SCE	
Yes	59.70%	50.00%	57.70%
No	40.30%	50.00%	42.30%
Total	100.00%	100.00%	100.00%

M09D. Use a credit card

	UTIL		Total
	PG&E	SCE	
Yes	19.40%	25.00%	20.50%
No	79.00%	75.00%	78.20%
(Don't Know)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

M09E. Pay for it some other way [SPECIFY]

	UTIL		Total
	PG&E	SCE	
Financing	8.10%	6.30%	7.70%
No	91.90%	93.80%	92.30%
Total	79.50%	20.50%	100.00%

### Satisfaction with Upgrades

Now, I have a few questions about the upgrades completed in your home and the contractor who completed them.

**S US2.** On a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied, how would you rate the overall quality of the EQUIPMENT installed by the contractor? [SCALE 1-5, 8=don't know, 9=refused]

	UTIL		Total
	PG&E	SCE	
3	1.60%	6.30%	2.60%
4	24.20%	31.30%	25.60%
5 - Very satisfied	71.00%	56.30%	67.90%
(Don't know)	3.20%	0.00%	2.60%

(Refused)	0.00%	6.30%	1.30%
Total	100.00%	100.00%	100.00%

S US3. On a scale of 1 to 5, with 1 being Very Dissatisfied and 5 being Very Satisfied, how would you rate the overall quality of the WORK performed by the contractor? [SCALE 1-5, 8=don't know, 9=refused]

	UTIL		Total
	PG&E	SCE	
1 - Very dissatisfied	1.60%	0.00%	1.30%
2	3.20%	0.00%	2.60%
3	8.10%	12.50%	9.00%
4	25.80%	25.00%	25.60%
5 - Very satisfied	61.30%	62.50%	61.50%
Total	100.00%	100.00%	100.00%

#### AKA-B

Now I am going to read you a few statements. For each one, please tell me your level of agreement on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree.' For some statements, there is a choice of "Not applicable" available. Please select this option if you have already taken these actions.

AK1. Completing a comprehensive package of modifications to my home, including sealing leaky windows and doors, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances will result in very deep savings. [SCALE 0-10, 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
1	3.20%	0.00%	2.60%
2	1.60%	0.00%	1.30%
4	4.80%	0.00%	3.80%
5	6.50%	18.80%	9.00%
6	1.60%	0.00%	1.30%
7	8.10%	18.80%	10.30%
8	12.90%	25.00%	15.40%

9	8.10%	12.50%	9.00%
10 - Strongly agree	51.60%	25.00%	46.20%
(Don't know)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

[ROTATE AK3-AK10]

AK3. I feel that it is my job to do as much as possible to my/our home to reduce energy use significantly. [SCALE 0-10, 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
2	1.60%	6.30%	2.60%
3	1.60%	0.00%	1.30%
5	6.50%	12.50%	7.70%
6	4.80%	6.30%	5.10%
7	19.40%	6.30%	16.70%
8	24.20%	12.50%	21.80%
9	3.20%	12.50%	5.10%
10 - Strongly agree	38.70%	43.80%	39.70%
Total	100.00%	100.00%	100.00%

AK5. Completing the full package of home modifications that includes sealing areas around windows and door, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances would significantly increase the comfort of a home. [SCALE 0-10, 96=NA, 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
4	1.60%	0.00%	1.30%
5	6.50%	12.50%	7.70%
6	3.20%	6.30%	3.80%
7	8.10%	12.50%	9.00%
8	17.70%	31.30%	20.50%
9	11.30%	6.30%	10.30%
10 - Strongly agree	48.40%	31.30%	44.90%

(NA)	3.20%	0.00%	2.60%
Total	100.00%	100.00%	100.00%

AK6. I was concerned enough about the environmental impacts of energy use that I completed a comprehensive package of home modifications to help. [SCALE 0-10, 96=NA, 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
0 - Strongly disagree	0.00%	6.30%	1.30%
1	6.50%	6.30%	6.40%
2	3.20%	6.30%	3.80%
3	6.50%	6.30%	6.40%
4	1.60%	0.00%	1.30%
5	16.10%	12.50%	15.40%
6	6.50%	6.30%	6.40%
7	9.70%	6.30%	9.00%
8	19.40%	6.30%	16.70%
9	3.20%	0.00%	2.60%
10 - Strongly agree	25.80%	43.80%	29.50%
(NA)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

AK7. My/our home had problems with drafts and cold or hot spots that I/we addressed with our recent energy upgrade. [SCALE 0-10, 96=NA, 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
0 - Strongly disagree	1.60%	6.30%	2.60%
1	4.80%	6.30%	5.10%
2	0.00%	6.30%	1.30%
3	1.60%	6.30%	2.60%
5	4.80%	6.30%	5.10%
6	1.60%	0.00%	1.30%
7	4.80%	0.00%	3.80%
8	22.60%	12.50%	20.50%
9	9.70%	6.30%	9.00%

10 - Strongly agree	45.20%	50.00%	46.20%
(NA)	3.20%	0.00%	2.60%
Total	100.00%	100.00%	100.00%

AK8. I would feel a little guilty about harming the environment if I didn't do all I could to my home to make it energy efficient. [SCALE 0-10, 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
0 - Strongly disagree	1.60%	12.50%	3.80%
1	4.80%	6.30%	5.10%
2	1.60%	6.30%	2.60%
3	4.80%	6.30%	5.10%
4	1.60%	0.00%	1.30%
5	19.40%	12.50%	17.90%
6	11.30%	6.30%	10.30%
7	8.10%	6.30%	7.70%
8	24.20%	18.80%	23.10%
9	4.80%	6.30%	5.10%
10 - Strongly agree	17.70%	12.50%	16.70%
(Don't know)	0.00%	6.30%	1.30%
Total	100.00%	100.00%	100.00%

AK9. I'm really not sure that my home needs to be as energy efficient as possible. [SCALE 0-10, 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
0 - Strongly disagree	19.40%	25.00%	20.50%
1	17.70%	12.50%	16.70%
2	12.90%	18.80%	14.10%
3	9.70%	0.00%	7.70%
4	4.80%	6.30%	5.10%
5	8.10%	18.80%	10.30%
6	1.60%	0.00%	1.30%
7	8.10%	0.00%	6.40%

8	8.10%	18.80%	10.30%
9	3.20%	0.00%	2.60%
10 - Strongly agree	6.50%	0.00%	5.10%
Total	100.00%	100.00%	100.00%

AK10. I wasn't sure whether my home was energy efficient or not. [SCALE 0-10, 96=NA 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
0 - Strongly disagree	8.10%	18.80%	10.30%
1	9.70%	12.50%	10.30%
2	3.20%	6.30%	3.80%
3	11.30%	12.50%	11.50%
4	6.50%	0.00%	5.10%
5	16.10%	6.30%	14.10%
7	3.20%	0.00%	2.60%
8	11.30%	18.80%	12.80%
9	4.80%	6.30%	5.10%
10 - Strongly agree	25.80%	18.80%	24.40%
Total	100.00%	100.00%	100.00%

## Satisfaction with the Inspection Process

**PM IP1.** Was your home inspected by someone from the program at any point?

	UTIL		Total
	PG&E	SCE	
Yes	67.70%	93.80%	73.10%
No	27.40%	6.30%	23.10%
(Don't Know)	3	0	3
(Don't Know)	4.80%	0.00%	3.80%
Total	100.00%	100.00%	100.00%

**PM IP2.** On a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied, how satisfied were you will the inspection process? [SCALE 1-5, 8=DK, 9=REF]

	UTIL		Total n=57
	PG&E n=42	SCE n=15	
1 - Very dissatisfied	2.40%	6.70%	3.50%
3	2.40%	13.30%	5.30%
4	19.00%	26.70%	21.10%
5 - Very satisfied	76.20%	53.30%	70.20%
Total	100.00%	100.00%	100.00%

[ASK IF IP2 <4]

**PM IP3.** Please explain why you gave that rating? [OPEN END]

	UTIL		Total n=5
	PG&E n=2	SCE n=3	
The results were not shared with me	50.00%	33.30%	40.00%
(Other)	50.00%	66.70%	60.00%
Total	40.00%	60.00%	100.00%

### Satisfaction with the Whole House Program

**ME WH1.** What do you think are the main benefits of participating in the Energy Upgrade California program? [OPEN END]

	UTIL		Total
	PG&E	SCE	
(Rebates or incentives)	33.90%	37.50%	34.60%
(Saving money on utility bills)	45.20%	68.80%	50.00%
(Saving energy)	38.70%	50.00%	41.00%
(Better for the environment)	30.60%	25.00%	29.50%
(Increased comfort)	43.50%	37.50%	42.30%
(Better health/air quality in the home)	6.50%	6.30%	6.40%

Encourages people to take action	12.90%	0.00%	10.30%
New equipment/upgrades/modernization of home	6.50%	0.00%	5.10%
(Don't know)	1.60%	0.00%	1.30%
Total	79.50%	20.50%	100.00%

**S WH2.** As a result of participating in the Energy Upgrade California Program, did you gain any energy-related knowledge that you didn't have before?

	UTIL		Total
	PG&E	SCE	
Yes	83.90%	68.80%	80.80%
No	14.50%	31.30%	17.90%
(Don't Know)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

[ASK IF WH2=1]

**S WH3.** What did you learn? [IF NECESSARY: Use the short list below when survey participant needs assistance getting started.] [OPEN END; MULT RESPONSE UP TO 5; 98=DK, 99=REF]

	UTIL		Total n=63
	PG&E n=52	SCE n=11	
(More aware of the benefits of treating the whole house as an energy system)	15.40%	27.30%	17.50%
(More aware of the importance of using high energy efficiency appliances)	15.40%	36.40%	19.00%
(Reminded me of various ways to save energy)	30.80%	27.30%	30.20%
Learned about HVAC, heating, cooling, insulation, etc	26.90%	27.30%	27.00%
What needed to be done to make my home more efficient	40.40%	9.10%	34.90%
The benefits of certain upgrades/additions/improvements	32.70%	36.40%	33.30%
(Other)	7.70%	9.10%	7.90%
(Don't know)	1.90%	0.00%	1.60%
Total	82.50%	17.50%	100.00%

**S WH4.** Do you know how much your energy usage should decrease as a result of the energy upgrade project?

	UTIL		Total
	PG&E	SCE	
Yes	53.20%	37.50%	50.00%
No	37.10%	56.30%	41.00%
(Don't Know)	9.70%	6.30%	9.00%
Total	100.00%	100.00%	100.00%

WH4a. Are you managing energy use in your home differently – now that you are completed with your energy upgrade?

	UTIL		Total
	PG&E	SCE	
Yes	54.80%	56.30%	55.10%
No	45.20%	43.80%	44.90%
Total	100.00%	100.00%	100.00%

[IF WH4a=1]

W4b. Can you please explain how?

	UTIL		Total n=43
	PG&E n=34	SCE n=9	
(Operate at a lower temperature for heating)	41.20%	66.70%	46.50%
(Operate at a higher temperature for cooling)	8.80%	44.40%	16.30%
(Use more natural ventilation)	11.80%	11.10%	11.60%
(Just set the temperature and leave it - it keeps the house comfortable)	8.80%	11.10%	9.30%
Use the CAC/HVAC more frequently because we can use it more efficiently	2.90%	0.00%	2.30%
General awareness around how to use energy/monitoring use	29.4%	22.2%	27.90%
Don't use inefficient appliances any more	8.80%	11.10%	9.30%
Turning off lights	17.60%	11.10%	16.30%

Installed CFLs	11.8%	0.00%	9.30%
Programmable thermostat	26.50%	0.00%	20.90%
(Other)	2.90%	0.00%	2.30%
Total	79.10%	20.90%	100.00%

**PM WH5.** Do you think that your utility bills are now higher, lower or the same, as what they would have been if the upgrades had not been completed?

	UTIL		Total
	PG&E	SCE	
Higher	4.80%	6.30%	5.10%
Lower	82.30%	75.00%	80.80%
The same	8.10%	6.30%	7.70%
(Too early to tell)	1.60%	6.30%	2.60%
(Don't Know)	3.20%	6.30%	3.80%
Total	100.00%	100.00%	100.00%

**S WH6.** Using a scale of 1 to 5 with 1 being very dissatisfied and 5 being very satisfied, how satisfied have you been with the Energy Upgrade Program as a whole? [SCALE 1-5, 8=don't know, 9=refused]

	UTIL		Total
	PG&E	SCE	
2	0.00%	12.50%	2.60%
3	4.80%	12.50%	6.40%
4	17.70%	25.00%	19.20%
5 - Very satisfied	77.40%	50.00%	71.80%
Total	100.00%	100.00%	100.00%

[SKIP IF DK REF]

WH7. Please explain why you gave the program that rating? [OPEN END]

	UTIL		Total
	PG&E	SCE	
House is more comfortable	25.80%	25.00%	25.60%
The financial incentives/rebates were good/made it affordable	33.90%	43.80%	35.90%

Contractor/staff was good, professional, nice, etc	11.30%	6.30%	10.30%
House is better for my health/safety	4.80%	0.00%	3.80%
The retrofit is saving me energy	17.70%	0.00%	14.10%
The retrofit is saving me money	21.00%	18.80%	20.50%
Satisfied with improvements/equipment/appliances	11.30%	0.00%	9.00%
Met expectations/no problems (general)	22.60%	12.50%	20.50%
Program/service is good/easy/helpful	19.40%	12.50%	17.90%
It took a long time to receive rebate/haven't received rebate	11.30%	31.30%	15.40%
Contractor/staff was not good, professional, nice, etc	1.60%	12.50%	3.80%
No results/no difference in bill/home comfort	3.20%	0.00%	2.60%
Too much/cumbersome paperwork	8.10%	6.30%	7.70%
Poor quality of work/didn't do what was promised	0.00%	18.80%	3.80%
(Don't know)	1.60%	0.00%	1.30%
Total	79.50%	20.50%	100.00%

**S WH10.** From your perspective, how can the program be improved? [OPEN END; MULT RESPONSE UP TO 5; 96=NONE, 98=DK, 99=REF]

	UTIL		Total
	PG&E	SCE	
More money (rebates, incentives, free goods, etc)	8.10%	12.50%	9.00%
Publicize it more	19.4%	12.5%	17.90%
Shorten the time it takes to get rebates/incentives	11.30%	18.80%	12.80%
Decrease the number of parties involved/streamline process	4.80%	25.00%	9.00%
Make the process easier to understand	3.20%	6.30%	3.80%
Better training for contractors	14.50%	0.00%	11.50%
Better communication/customer service/program information	14.50%	18.80%	15.40%
Loosen contractor restrictions/be able to use any contractor	6.50%	6.30%	6.40%
(None)	24.20%	6.30%	20.50%
(Other)	6.50%	12.50%	7.70%
(Don't know)	6.50%	6.30%	6.40%

(Refused)	1.60%	0.00%	1.30%
Total	79.50%	20.50%	100.00%

**PM WH11.** Have you talked to friends and family about the program?

	UTIL		Total
	PG&E	SCE	
Yes	95.20%	68.80%	89.70%
No	4.80%	31.30%	10.30%
Total	100.00%	100.00%	100.00%

[ASK IF WH11=1]

**PM WH12.** What did you tell them? [OPEN END; MULT RESPONSE UP TO 3; 96=Nothing, 98=DK, 99=REF]

	UTIL		Total n=70
	PG&E n=59	SCE n=11	
General program benefits/good program	37.30%	36.40%	37.10%
The availability of rebates/incentives/program is a good deal	42.40%	54.50%	44.30%
Increasing efficiency/saving energy	10.20%	9.10%	10.00%
I recommend the program/contractor to them	39.00%	36.40%	38.60%
Savings on utility bill	5.10%	18.20%	7.10%
Increase in home comfort	6.80%	18.20%	8.60%
Explained various upgrades/improvements that were done	25.4%	45.5%	28.60%
(Negative comment about program)	3.40%	18.20%	1.40%
Total	84.30%	15.70%	100.00%

[ASK IF WH11=2]

**PM WH13.** If you were to talk to friends or family about the program, what would you tell them about it? [OPEN END; MULT RESPONSE UP TO 3; 96=Nothing, 98=DK, 99=REF]

	UTIL		Total n=8
	PG&E n=3	SCE n=5	

About my negative experience	33.30%	40.00%	37.50%
Do it/worthwhile/affordable	66.70%	60.00%	62.50%
Total	37.50%	62.50%	100.00%

**PM WH14.** Would you recommend this program to friends and family?

	UTIL		Total
	PG&E	SCE	
Yes	100.00%	93.80%	98.70%
No	0.00%	6.30%	1.30%
Total	100.00%	100.00%	100.00%

Now...

## BLOCK 2 (Extends from SE1 through SE7)

### AKA-Segmentation

I am going to ask you a few questions about energy-related issues and about energy-saving actions you may have done in your home.

**SE SE3.** Have you heard of a carbon footprint? [IF NECESSARY: A carbon footprint is a measure of the energy you use throughout your life, either directly or indirectly. This includes but is not limited to the energy consumption from your home, your transportation, your diet, and your purchases].

	UTIL		Total
	PG&E	SCE	
Yes	80.60%	62.50%	76.90%
No	19.40%	37.50%	23.10%
Total	100.00%	100.00%	100.00%

**SE SE4.** Now, I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means Completely agree, please tell me how much you agree with each statement. [ROTATE A-I] [SCALE 0-10, 98=DK, 99=REF]

**SE SE4B.** I often worry that the cost of energy for my home will increase.

	UTIL		Total
	PG&E	SCE	

0 - Not at all agree	0.00%	12.50%	2.60%
2	6.50%	0.00%	5.10%
3	3.20%	0.00%	2.60%
4	3.20%	0.00%	2.60%
5	6.50%	12.50%	7.70%
6	3.20%	6.30%	3.80%
7	11.30%	6.30%	10.30%
8	16.10%	12.50%	15.40%
9	6.50%	18.80%	9.00%
10 - Completely agree	43.50%	31.30%	41.00%
Total	100.00%	100.00%	100.00%

**SE SE4C.** I am very concerned about how energy use affects the environment.

	UTIL		Total
	PG&E	SCE	
0 - Not at all agree	1.60%	0.00%	1.30%
1	1.60%	0.00%	1.30%
3	3.20%	0.00%	2.60%
5	6.50%	18.80%	9.00%
6	4.80%	12.50%	6.40%
7	8.10%	12.50%	9.00%
8	27.40%	18.80%	25.60%
9	6.50%	6.30%	6.40%
10 - Completely agree	40.30%	31.30%	38.50%
Total	100.00%	100.00%	100.00%

**SE SE4E.** I feel guilty if I use too much energy.

	UTIL		Total
	PG&E	SCE	
0 - Not at all agree	3.20%	6.30%	3.80%
1	3.20%	0.00%	2.60%
2	1.60%	6.30%	2.60%
4	1.60%	0.00%	1.30%
5	6.50%	25.00%	10.30%

6	6.50%	0.00%	5.10%
7	9.70%	6.30%	9.00%
8	29.00%	31.30%	29.50%
9	8.10%	6.30%	7.70%
10 - Completely agree	29.00%	18.80%	26.90%
(Refused)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

**SE SE4F.** I intend to conserve on gas or electricity consumption in my home this winter

	UTIL		Total
	PG&E	SCE	
5	1.60%	6.30%	2.60%
6	1.60%	6.30%	2.60%
7	4.80%	0.00%	3.80%
8	19.40%	18.80%	19.20%
9	9.70%	12.50%	10.30%
10 - Completely agree	61.30%	56.30%	60.30%
(Refused)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

**SE SE4G.** I intend to conserve on electricity consumption in my home this summer.

	UTIL		Total
	PG&E	SCE	
5	6.50%	6.30%	6.40%
6	3.20%	0.00%	2.60%
7	4.80%	6.30%	5.10%
8	22.60%	25.00%	23.10%
9	4.80%	6.30%	5.10%
10 - Completely agree	58.10%	56.30%	57.70%
Total	100.00%	100.00%	100.00%

**SE SE4I.** I have to take the lead in my household if we're going to keep our utility bills down.

	UTIL		Total
	PG&E	SCE	
0 - Not at all agree	1.60%	6.30%	2.60%
1	3.20%	0.00%	2.60%
2	4.80%	0.00%	3.80%
3	1.60%	0.00%	1.30%
5	17.70%	12.50%	16.70%
6	4.80%	0.00%	3.80%
7	1.60%	0.00%	1.30%
8	8.10%	12.50%	9.00%
9	9.70%	6.30%	9.00%
10 - Completely agree	43.50%	62.50%	47.40%
(Refused)	3.20%	0.00%	2.60%
Total	100.00%	100.00%	100.00%

**SE SE5.** Next, I'm going to read a list of energy-saving actions. For each action, please tell me if your household has already taken the action. Did you...? [ROTATE] [1=Yes, 2=No, 3= (Came with the house), 98=DK, 99=REFUSED]

**SE SE5A.** install an attic vent to keep the attic cooler

	UTIL		Total
	PG&E	SCE	
Yes	45.20%	50.00%	46.20%
No	40.30%	37.50%	39.70%
(Came with the house)	14.50%	12.50%	14.10%
Total	100.00%	100.00%	100.00%

**SE SE5B.** install programmable thermostats

	UTIL		Total
	PG&E	SCE	
Yes	85.50%	68.80%	82.10%
No	6.50%	25.00%	10.30%
(Came with the house)	8.10%	6.30%	7.70%

Total	100.00%	100.00%	100.00%
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**SE SE5C. install ceiling fans**

	UTIL		Total
	PG&E	SCE	
Yes	41.90%	68.80%	47.40%
No	45.20%	25.00%	41.00%
(Came with the house)	12.90%	6.30%	11.50%
Total	100.00%	100.00%	100.00%

**SE SE5D. install motion detectors for lights**

	UTIL		Total
	PG&E	SCE	
Yes	33.90%	43.80%	35.90%
No	62.90%	56.30%	61.50%
(Came with the house)	3.20%	0.00%	2.60%
Total	100.00%	100.00%	100.00%

**SE SE6.** On a scale of 1 to 7 where 1 is Strongly Disagree and 7 is Strongly Agree, please tell me how much you agree or disagree with the following statement. [SCALE 1-7, 98=DK, 99=REF]

- a. I compare prices of at least a few brands before I choose one.

	UTIL		Total
	PG&E	SCE	
1 - Strongly disagree	1.60%	0.00%	1.30%
3	1.60%	6.30%	2.60%
4	1.60%	0.00%	1.30%
5	22.60%	6.30%	19.20%
6	12.90%	6.30%	11.50%
7 - Strongly agree	59.70%	81.30%	64.10%

Total	100.00%	100.00%	100.00%
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**SE SE7.** I'm going to read you a list of six reasons why people might change their daily actions to save energy. Please tell me which of these would motivate you the MOST to save energy? [READ CHOICES] [ROTATE] [IF DK, PROBE "if you had to choose from the following reasons which one would motivate you the most"]

	UTIL		Total
	PG&E	SCE	
Saving money	32.30%	56.30%	37.20%
Maintaining Health	11.30%	0.00%	9.00%
Protecting the environment	25.80%	12.50%	23.10%
For the benefit of future generations	6.50%	12.50%	7.70%
Reducing our dependence on foreign oil	14.50%	0.00%	11.50%
Helping California lead the way on saving energy	5	2	7
Helping California lead the way on saving energy	8.10%	12.50%	9.00%
(Don't know)	1.60%	0.00%	1.30%
(Refused)	0	1	1
(Refused)	0.00%	6.30%	1.30%
Total	100.00%	100.00%	100.00%

Now...

### BLOCK 3 (Extends from D1 through closing; always occurs last)

#### Demographics

I just have a few more questions left.

**ME D1.** How many people currently live in your household year-round (more than nine months out of the year), including yourself? [NUMERIC OPEN END, 99 Refused]

	UTIL		Total
	PG&E	SCE	
1	8.10%	0.00%	6.40%
2	51.60%	37.50%	48.70%
3	19.40%	43.80%	24.40%
4	14.50%	12.50%	14.10%

5	4.80%	6.30%	5.10%
7	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

[SKIP IF D1=1]

ME D2. How many children 18 and younger currently live in your household year-round (more than nine months out of the year)? [NUMERIC OPEN END, 99 Refused]

	UTIL		Total n=73
	PG&E n=57	SCE n=16	
0	63.20%	43.80%	58.90%
1	19.30%	37.50%	23.30%
2	14.00%	12.50%	13.70%
3	1.80%	6.30%	2.70%
4	1.80%	0.00%	1.40%
Total	100.00%	100.00%	100.00%

ME D3. Which of the following best represents your annual household income from all sources in 2011, before taxes? Was it ...

	UTIL		Total
	PG&E	SCE	
Under \$25,000	1.60%	0.00%	1.30%
\$25,000 to under \$35,000	8.10%	0.00%	6.40%
\$35,000 to under \$50,000	11.30%	12.50%	11.50%
\$50,000 to under \$75,000	17.70%	18.80%	17.90%
\$75,000 to under \$100,000	8.10%	6.30%	7.70%
\$100,000 to \$150,000	17.70%	37.50%	21.80%
Over \$150,000	33.90%	12.50%	29.50%
(Refused)	1.60%	12.50%	3.80%
Total	100.00%	100.00%	100.00%

ME D4. What is the last grade of school you completed?

	UTIL		Total
	PG&E	SCE	
High school graduate	4.80%	12.50%	6.40%
Some collage/Vocational or technical school	19.40%	31.30%	21.80%
College graduate	48.40%	12.50%	41.00%

Post graduate education	25.80%	43.80%	29.50%
(Refused)	1.60%	0.00%	1.30%
Total	100.00%	100.00%	100.00%

ME D5. In what year were you born? [NUMERIC OPEN END; 1900-1999]

	UTIL		Total
	PG&E	SCE	
1926	1.60%	0.00%	1.30%
1931	1.60%	0.00%	1.30%
1933	1.60%	0.00%	1.30%
1934	1.60%	0.00%	1.30%
1938	1.60%	0.00%	1.30%
1939	1.60%	0.00%	1.30%
1940	3.20%	0.00%	2.60%
1943	4.80%	0.00%	3.80%
1944	1.60%	0.00%	1.30%
1946	3.20%	0.00%	2.60%
1947	3.20%	0.00%	2.60%
1948	4.80%	6.30%	5.10%
1951	1.60%	0.00%	1.30%
1952	1.60%	6.30%	2.60%
1953	3.20%	0.00%	2.60%
1955	1.60%	12.50%	3.80%
1957	1.60%	12.50%	3.80%
1958	4.80%	0.00%	3.80%
1959	1.60%	12.50%	3.80%
1961	3.20%	0.00%	2.60%
1962	1.60%	12.50%	3.80%
1963	3.20%	0.00%	2.60%
1964	3.20%	0.00%	2.60%
1965	1.60%	0.00%	1.30%
1966	1.60%	6.30%	2.60%
1967	1.60%	0.00%	1.30%
1968	0.00%	6.30%	1.30%
1970	3.20%	0.00%	2.60%
1972	6.50%	0.00%	5.10%

1973	1.60%	6.30%	2.60%
1975	3.20%	0.00%	2.60%
1976	3.20%	0.00%	2.60%
1977	1.60%	0.00%	1.30%
1978	3.20%	0.00%	2.60%
1979	1.60%	0.00%	1.30%
1980	1.60%	0.00%	1.30%
1981	3.20%	6.30%	3.80%
1983	1.60%	0.00%	1.30%
1986	1.60%	0.00%	1.30%
1987	1.60%	0.00%	1.30%
1988	1.60%	0.00%	1.30%
1989	1.60%	0.00%	1.30%
(Refused)	0.00%	12.50%	2.60%
Total	100.00%	100.00%	100.00%

**ME D6.** Which of the following best describes your race or ethnicity?

	UTIL		Total
	PG&E	SCE	
White or Caucasian	77.40%	43.80%	70.50%
Hispanic, Mexican, Latino, Puerto Rican, or other Hispanic	4.80%	25.00%	9.00%
Chinese	9.70%	6.30%	9.00%
Indian or South Asian	3.20%	0.00%	2.60%
Other Asian or Pacific Islander	3.20%	12.50%	5.10%
Mixed or multi-racial	1.60%	0.00%	1.30%
(Refused)	0.00%	12.50%	2.60%
Total	100.00%	100.00%	100.00%

**ME D8.** In what year was your home built?

	UTIL		Total
	PG&E	SCE	
1991 to 2000	11.30%	6.30%	10.30%
1981 to 1990	11.30%	18.80%	12.80%
1971 to 1980	11.30%	18.80%	12.80%
1961 to 1970	11.30%	25.00%	14.10%

1951 to 1960	17.70%	18.80%	17.90%
1941 to 1950	19.40%	0.00%	15.40%
1940 or earlier	17.70%	12.50%	16.70%
Total	100.00%	100.00%	100.00%

ME D9. How long have you owned this home?

	UTIL		Total
	PG&E	SCE	
Less than 5 years	48.40%	25.00%	43.60%
6-10 years	12.90%	18.80%	14.10%
11-15 years	6.50%	12.50%	7.70%
16-20 years	8.10%	18.80%	10.30%
21-25 years	1.60%	12.50%	3.80%
26-30 years	8.10%	0.00%	6.40%
More than 30 years	14.50%	12.50%	14.10%
Total	100.00%	100.00%	100.00%

D10. How much longer do you intend to live in this home?

	UTIL		Total
	PG&E	SCE	
(Less than 5 years)	4.80%	0.00%	3.80%
(6-10 years)	19.40%	12.50%	17.90%
(11-15 years)	8.10%	0.00%	6.40%
(16-20 years)	9.70%	12.50%	10.30%
(More than 20 years)	41.90%	75.00%	48.70%
(Don't Know)	16.10%	0.00%	12.80%
Total	100.00%	100.00%	100.00%

## Closing

That is all of the questions I have for you today.

I just need to confirm your name and address so that we may send you the [IF PG&E = \$100, IF SCE = \$50] incentive in appreciation for your time today? [CONFIRM AND COLLECT NAME, AND ADDRESS, CITY, ZIP]

A check will arrive within 2 to 3 weeks.

Thank you very much for your time.

## 4. CONTRACTOR SURVEYS

### 4.1. Survey Instruments

#### 4.1.1. Group A: Qualified/Certified, but not on EUC list

##### Introduction

Thank you for taking the time to speak with me today. The SBW evaluation team is currently conducting a process evaluation of [IOU's] Energy Upgrade California's Whole House Rebate Program (I'll call it the EUC program). In appreciation for your time, we are offering you a \$100 incentive to speak with us. We understand that you may not be participating in this program, but we'd like to ask you some questions about your company and the program that will take about 15 minutes to cover. Your individual responses will remain confidential in our report and will not be tied to your name or your company name.

Can we please speak with [CONTACT NAME] or the person within your company that is aware of the EUC program and who knows whether your firm has any BPI certified staff?

[CONTINUE WITH PERSON WHO IS AWARE, REPEAT INTRO AS NEEDED]

[TERMINATE IF NO ONE IN THE COMPANY IS AWARE OF THE PROGRAM]

Before starting the survey, we have to ask two questions to make sure you qualify.

##### Screener

S1. First, our records indicate that you or someone within your company is BPI certified. Is that correct?

1. (Yes)
2. (No) [THANK AND TERMINATE]
98. (Don't Know) [THANK AND TERMINATE]

S2. Also, our records indicate that your company is not yet participating in the EUC Program? Is that correct?

1. (Yes)
2. (No) [THANK AND TERMINATE]
98. (Don't Know) [THANK AND TERMINATE]

O.k., you qualify for this survey. Now we can get started.

##### Contractor Background

C1. Can you describe the types of services you provide to customers?

1. HVAC
2. Building audits and testing
3. Windows

4. Insulation
5. Home remodeling
6. New home construction
0. Other (Specify) \_\_\_\_\_

C2. How many employees does your company have serving SCE territory? (If contractor does not know, ask, "Generally speaking about how many of your employees serve southern California?)

C3. How many employees does your company have serving PG&E territory? (If contractor does not know, ask, "Generally speaking about how many of your employees serve northern California?)

### **Program Impressions & Barriers to Participation**

PA1. Prior to this call, had you heard of the Energy Upgrade California, or the EUC, program?

[IF NO, SKIP TO PA5]

- a. [IF YES] Where did you first hear about it?
- b. [IF YES] Have you attended a EUC workshop?
  1. [IF YES] . What made you decide to attend a Participation Workshop?
- c. [IF YES] Are you aware of the differences between the basic and advanced incentive packages offered to customers through the program?
- d. [IF YES, AND IF SCE] Have you heard of the "flex path"?
  1. [IF YES] What do you know about it? How does it compare to the basic and advanced packages?

PA2. What do you see as the benefits of the program?

- a. Are you aware of the differences between the basic and advanced incentive packages offered to customers through the program?

PA3. What have you heard about the program so far? [PROBE FOR IMPRESSIONS]

- a. What, if anything, have you heard about the program from customers?
- b. What, if anything, have you heard about the program from other contractors?

PA4. Have you attempted to become a [IOU]-approved contractor for the EUC program? [NOTE TO INTERVIEWER: BE SURE TO ASK ABOUT BOTH IOUs IF CONTRACTOR WORKS IN BOTH TERRITORIES]

- a. [IF NO] Why haven't you done that yet?
- b. [IF YES] Can you describe any issues that you encountered while attempting to gain [IOU] approval?

PA5. The EUC Program is a program in California sponsored by [IOU] and local governments, that gives incentives to customers who do comprehensive retrofits at the same time such as insulation, an HVAC system, duct sealing, air sealing or new windows. The program requires

that a participating contractor conduct a home energy assessment first to see if they can qualify for incentives. If they qualify, customers receive incentive amounts based upon the estimated energy savings from the home retrofit. Have you completed any jobs in the last year that might have qualified for the EUC program, but have not and will not be submitted to the EUC program?

- a. [IF YES] What types of retrofits have you done that you think might have qualified for the program? Which of the packages would they have qualified for? Advanced or Basic or (SCE only) Flex?

- b. How many of each of these jobs have you done in the past year?

[IF UNAWARE OF THE PROGRAM PRIOR TO THIS INTERVIEW GO TO PA10]

[ASK FOLLOWING IF THEY HAVE HEARD OF THE PROGRAM]

PA6. [IF SCE] Are you aware of Los Angeles County's participation in the Energy Upgrade program?

a. [IF YES] Were you aware of the following LA County EUC program components before this call? [YES, NO, DK FOR EACH BELOW]

1. Additional incentives of \$1000-\$4000 on top of the utility incentives
2. Scholarships to reimburse you for training certifications
3. 2% financing for homeowner energy upgrades
4. Regular program updates such as e-blasts and newsletters
5. TV, radio, and print ads drumming up homeowner demand

PA7. The EUC program is interested in finding ways to encourage more contractors to participate. Please tell me if any of the following are reasons for why your company has not participated in the program so far? [YES, NO, DK FOR EACH BELOW]

- a. The paperwork required
- b. The training required
- c. The availability of local trainings
- d. Not sure if the program will be around for a long time
- e. Rebate processing time
- f. The incentives are not high enough
- g. The sales and marketing required
- h. The reputation of the program
- i. Upfront investment

PA8. Are there any other reasons for why your company has not participated in the program that we haven't covered?

- a. [IF YES] Please describe these other reasons.

PA9. What do you think the utility could do or say to encourage you to participate in the program?

[ASK ALL]

PA10. Would you be interested in learning more about this program?

- a. [IF YES] What is the best way to reach you with more information about this program?
- b. [IF NO] Why not?

**AKA-B**

I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means Completely agree, please tell me how much you agree with each statement.

[NOTE TO INTERVIEWER: This first set of AKA-B questions have to do with the contractor's professional practice and attitudes.]

AK1. The comfort of a home that has sealing around windows and doors, insulated walls and attics, insulated hot water systems, and all high-efficiency appliances would be significantly greater than that for a home without these features.

AK2. The energy costs of a home that has these features would be significantly less than one that does not.

AK3. Household electricity use has an impact on the environment.

AK4. I am concerned that global climate change will increase if homeowners do not make their homes more energy efficient.

AK5. It is my responsibility to highlight the potential financial savings that can result from energy assessments and retrofits to my customers.

AK6. It is not my responsibility to help the environment by encouraging my customers to save energy.

AK7. I intend to promote energy efficiency to my customers.

AK8. I very often encourage my customers to do a comprehensive retrofit of their homes to reduce energy use and increase comfort.

[NOTE TO INTERVIEWER: This next set of AKA-B questions has to do with the contractor's personal practice and attitudes.]

AK9. I often worry that the cost of energy for my *own* home will increase.

AK10. I am very concerned about how energy use affects the environment.

AK11. I have to take the lead in my *own* household if we're going to keep our utility bills down.

AK12. It is not my responsibility to use as little energy as possible to help the environment.

AK13. I intend to conserve on electricity consumption in my *own* home this summer.

## Closing

CL1. Those are all the questions I have. What else do you think we would want to know about your experiences with the program based on our conversation today?

CL2. I want to make sure we get you your check. Can I confirm your name, its spelling, and the address we will send the check to?

CL3. Finally, we would love to talk with you again in a year. Would it be OK to call you then?

1. (Yes)
2. (No)
3. (Maybe)

Thank you for your time.

## 4.1.2. Group B: On the EUC list, but has not completed any projects for WH

### Introduction

Thank you for taking the time to speak with me today. The SBW evaluation team is currently conducting a process evaluation of [IOU's] Energy Upgrade California's Whole House Services Program (I'll call it the EUC program). In appreciation for your time, we are offering you a \$150 incentive to speak with us. We understand that you are listed as an EUC contractor on the EUC website but may not have submitted project applications to the program yet, but we'd like to ask you some questions about your company and the program that will take about 40 minutes to cover. Your individual responses will remain confidential in our report and will not be tied to your name or your company name.

Can we please speak with [CONTACT NAME] or the person within your company that is aware of Energy Upgrade California and participated in any Program training or participation workshops?

[CONTINUE WITH CORRECT PERSON, REPEAT INTRO AS NEEDED]

[TERMINATE IF NO ONE IN THE COMPANY FITS DESCRIPTION]

[GO TO GROUP C INTERVIEW IF COMPANY INDICATES THEY HAVE SUBMITTED AN APPLICATION]

Before starting the survey, we have to ask two questions to make sure you qualify.

### Screener

S1. First, our records indicate that your company is listed as a participating contractor in the EUC Program for [IOU]. Is that correct?

1. (Yes)
2. (No) [THANK AND TERMINATE]
98. (Don't Know) [THANK AND TERMINATE]

S2. Also, our records indicate that your company has not submitted any projects to the EUC program for incentives yet? Is this correct?

1. (Yes)
2. (No) [IF HAVE SUBMITTED PROJECTS CONTINUE WITH GROUP C INTERVIEW]
98. (Don't Know) [THANK AND TERMINATE]

O.k., you qualify for this survey. Now we can get started.

### Contractor Background

C1. Can you describe the types of services you provide to customers?

1. HVAC
2. Building audits and testing

3. Windows
4. Insulation
5. Home remodeling
6. New home construction
0. Other (Specify) \_\_\_\_\_

C2. How many employees does your company have serving SCE territory? (If contractor does not know, ask, "Generally speaking about how many of your employees serve southern California?")

- a. And how many of those employees work on retrofitting homes? [IF NEEDED: AS OPPOSED TO ANY STAFF YOU MAY HAVE THAT IS DEDICATED TO SALES OR ADMINISTRATION]

C3. How many employees does your company have serving PG&E territory? (If contractor does not know, ask, "Generally speaking about how many of your employees serve northern California?")

- a. And how many of those employees work on retrofitting homes? [IF NEEDED: AS OPPOSED TO ANY STAFF YOU MAY HAVE THAT IS DEDICATED TO SALES OR ADMINISTRATION]

### **BPI Certification**

B1. Is your company accredited by BPI?

- a. [IF NO] Can you tell me why?
- b. [If YES] Did you receive financial aid from an outside source to do so?

B2. How many BPI certified individuals does your company have in SCE territory?

B3. How many BPI certified individuals does your company have in PG&E territory?

B4. What role(s) do these BPI certified personnel play relative to EUC installations and procedures? [YES, NO, DK FOR EACH BELOW]

1. Perform combustion appliance safety testing
2. Perform the EUC installations and procedures themselves
3. Teach others the appropriate procedures
4. Assure quality of others' EUC work
5. Perform test in and test out
6. Conduct energy modeling
7. Other (please specify) \_\_\_\_\_

B5. What is your opinion of the BPI approach? Why do you say that?

### **Program Impressions and Barriers**

PA7. Please tell me if any of the following are reasons for why your company has not yet submitted any jobs to [IOU] in the program so far? [YES, NO, DK FOR EACH BELOW]

- a. The paperwork required
- b. The training required

- c. The availability of local trainings
- d. Not sure if the program will be around for a long time
- e. Rebate processing time
- f. The incentives are not high enough
- g. The sales and marketing required
- h. The necessary tools needed to do the assessment and upgrade work

PA8. The program is interested in finding ways to encourage more contractors to participate. Are there any other reasons for why your company has not yet submitted any jobs to [IOU] in the program that we haven't covered?

- a. [IF YES] Please describe these other reasons.

PA9. What do you think the utility could do or say to encourage you to participate in the program?

PA10. Have you completed any home energy assessments or audits outside of the program in the last year?

- a. [IF YES] How many home assessments have you done outside of the program so far?
- b. Did you use the BPI (Building Performance Institute) protocol or some other assessment protocol?
- c. Among these customers, about what percentage would have qualified for program rebates based on potential savings indicated by the assessments?

PA11. Even though you have not submitted any jobs to [IOU], in the last year, have you completed any home energy assessments or audits with the intent of submitting them as part of the program?

- a. [IF YES] How many home assessments have you done as part of the program so far?

[ASK IF THEY HAVE DONE ENERGY ASSESSMENTS OUTSIDE THE PROGRAM ]

PA12. On average, about how many customers do you contact before you are able to complete one energy assessment?

- a. Do you offer a free in-home walk-through, or do you have the homeowner commit some money to the cost of the assessment?

PA13. In the last year, have you conducted any retrofit jobs you believe would have qualified for the EUC program but that you did not submit it?

- a. [IF YES] Why did you decide not to submit it to [IOU] for rebates?

PA14. [ASK IF SCE] Are you aware of Los Angeles County's participation in the Energy Upgrade program?

a. [IF YES] Were you aware of the following LA County EUC program components before this call? [YES, NO, DK FOR EACH BELOW]

- 1. Additional incentives of \$1000-\$4000 on top of the utility incentives
- 2. Scholarships to reimburse you for training certifications

3. 2% financing for homeowner energy upgrades
4. Regular program updates such as e-blasts and newsletters
5. TV, radio, and print ads drumming up homeowner demand

PA15. [IF SCE] Have you heard of the “flex path”?

1. [IF YES] What do you know about it? How does it compare to the basic and advanced packages?

### **Contractor Recruiting, Training, and Mentoring**

R1. How many of your employees attended the EUC Participation Workshop?

- a. [ASK IF > 1] After attending the Participation Workshop, did you feel that your organization was prepared to participate in the EUC program?
- b. [IF NO] Why not?

R2. How many of your employees attended the 3-day Basic Path training offered by [IOU]?

- a. [ASK IF > 1] After attending Basic Path training, did you or your staff feel prepared to perform the tasks required for the Basic Upgrade Package?
1. [IF NO] Why not?

R3. What training did your BPI certified personnel complete to help them obtain the certification?

- a. Who sponsored this training?
- b. How many days of training did this involve?
- c. Did you receive a scholarship or a loan to finance the training?

R4. Have any of your staff who are not BPI certified received training that would help prepare them to implement EUC measures and procedures? (Such as: attic insulation, duct sealing, air sealing, etc.)

- a. [IF YES] What training did they receive?

R5. What types of employees are responsible for the EnergyPro software modeling required for the program? [PROBE FOR JOB TITLES SUCH AS GENERAL MANAGERS, OWNERS, ETC.]

R6. Did anyone in your company use EnergyPro or any other home energy modeling software before participating in the program?

[IF ANOTHER SOFTWARE] Which one?

R6. Have you received instruction on how to use the EnergyPro software program?

- a. [IF YES] On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the EnergyPro instruction you received?
- b. [IF NO] Why not?

R7. (SCE Only) Did you receive training on how to size HVAC equipment based on the expected energy use and size of the home?

a. [IF YES] On a scale of 0-10 with 0 being not at all and 10 being very much, how much did you benefit from this training?

R8. (SCE ONLY) Are you currently participating in SCE's Energy Star Residential HVAC Quality Installation Program (QI)?

R10. Have you received any mentoring related to the EUC program?

a. [IF YES] Which type(s) did you receive? [YES OR NO TO EACH BELOW]

1. Field / Data Collection
2. JRT (Job Reporting Template)/ Job Processing
3. Energy Pro software
4. Mentoring received during onsite Quality Control inspection

[ASK FOR EACH TYPE OF MENTORING RECEIVED]

b. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the [INSERT FOR EACH YES IN R10a 1-4] mentoring you received?

R11. What other types of EUC-related training would benefit you or your staff?

R12. Do you or your company have an interest in getting additional training on how to best market your company and its services?

a. [IF NO] Why not?

### **EnergyPro**

E1. Do you think EnergyPro covers the major opportunities for energy efficiency?

a. [IF NOT] Why not?

E2. Do you think EnergyPro is accurate in its estimates?

a. [IF NOT] Why not?

E3. What do you think are the main pros and cons to using EnergyPro?

E4. Does your company use any other software programs to model estimated energy usage outside of the EUC program?

### **Customer Sales/Marketing**

CS1. Has your company been actively promoting the program to new or existing customers?

- a. [IF NOT] Why not? [SKIP TO CB1]
- b. [IF SO] Please describe who you have been promoting the program to.

CS2. What marketing has your company done to get customers interested in a EUC retrofit?

- a. What marketing materials do you use?
- b. Where did you get the marketing materials?
- c. What types of marketing materials did you find most effective?

d. [ASK IF SCE] Have you utilized any LA County or QI Program co-op marketing funds?

CS3. What sales tools do you use to present information to prospective customers?

CS4. What types of messages seem to motivate customers to get the work done? [PROBE FOR: SAVING ENERGY, SAVING MONEY, COMFORT, SAFETY, HEALTH] Is there a combination of messages that is especially effective?

CS5. Have you used other programs in combination with EUC to help sell the job?

a. [IF YES] What other programs?

CS5. What do you think are the best ways to engage customers about participating in the program?

CS6. Have any customers come to you inquiring about the program?

a. Where do your customers typically hear about the program?

CS7. In your opinion, what types of advertising or marketing are the most effective in generating customer interest in EUC?

### **Customer Participation Barriers**

CB1. What do you think keeps customers from participating in the program in general?

CB2. What do you think are the top three reasons customers decide not to move forward from the energy assessment to a retrofit?

CB3. Do you have any ideas as to how the program can get these customers to move forward?

CB4. About what percentage of assessments don't go forward due to lack of financing. About how many jobs does this represent?

CB5. We understand that these projects are typically expensive for a customer. How do you think program-based financing could best be structured to make customers more likely to proceed with the job after an assessment?

a. who would receive the financing? Contractor or customer?

b. what would be the terms?

### **Program Satisfaction**

I'm going to ask you a series of questions that are intended to determine your satisfaction with the EUC program.

PS1. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with:

a. Communications with the utilities about program requirements

- b. Communications with local government about program requirements
- c. The paperwork requirements for the program
- d. The Energy Pro modeling software
- e. Marketing support from the local government whose jurisdiction you most often work
- f. Marketing support from the utility
- g. Training offered by the program
- h. Program incentives
- i. Additional local government incentives
- j. Program measure installation requirements
- k. Program overall

[FOR EACH PS1a-g < 5]

PS2. Why do you give that rating?

PS3. What would you say are the positive features of the program overall?

PS4. What would you say are the biggest problems of the program overall?

PS5. How do you feel about local government's involvement in the program overall?

PS5. Do you have any suggestions for how [IOU] could solve these problems?

### **Program Design**

PD1. What do you see as the strengths of the basic upgrade package of the program?

PD2. What do you see as the weaknesses of the basic upgrade package?

PD3. Could the basic upgrade package be improved in any way?

PD4. What do you see as the strengths of the advanced upgrade package of the program?

PD5. What do you see as the weaknesses of the advanced upgrade package?

PD6. Could the advanced upgrade package be improved in any way?

- a. [IF YES] How?
- b. [IF NO] Why not?

PD7. Would you prefer to use software other than EnergyPro for modeling?

- a. [IF YES] What?

PD8. In the future, would you be willing to float the rebate, i.e. discount the job to the customer and then have the rebate come to you?

- a. [IF NO] Why not?

- b. [IF YES] What terms would make this arrangement acceptable to you?
- c. [IF YES] Please describe the impact, if any, this might have on the number of jobs you could complete.

### **Inter Contractor Conversation**

ICC1. Have you talked to other EUC contractors outside of your company about the EUC program?

- a. [IF YES] What is the nature of those conversations?

Probe for:

Frequent topics, issues, questions, or concerns

### **AKA-B**

I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means Completely agree, please tell me how much you agree with each statement.

[NOTE TO INTERVIEWER: This first set of AKA-B questions have to do with the contractor's professional practice and attitudes.

AK1. The comfort of a home that has sealing around windows and doors, insulated walls and attics, insulated hot water systems, and all high-efficiency appliances would be significantly greater than that for a home without these features.

AK2. The energy costs of a home that has these features would be significantly less than one that does not.

AK3. Household electricity use has an impact on the environment.

AK4. I am concerned that global climate change will increase if homeowners do not make their homes more energy efficient.

AK5. It is my responsibility to highlight the potential financial savings that can result from energy assessments and retrofits to my customers.

AK6. It is not my responsibility to help the environment by encouraging my customers to save energy.

AK7. I intend to promote energy efficiency to my customers.

AK8. I very often encourage my customers to do a comprehensive retrofit of their homes to reduce energy use and increase comfort.

[NOTE TO INTERVIEWER: This next set of AKA-B questions has to do with the contractor's personal practice and attitudes.]

AK9. I often worry that the cost of energy for my own home will increase.

AK10. I am very concerned about how energy use affects the environment.

AK11. I have to take the lead in my *own* household if we're going to keep our utility bills down.

AK12. It is not my responsibility to use as little energy as possible to help the environment.

AK13 I intend to conserve on electricity consumption in my *own* home this summer.

### **Closing**

CL1. Those are all the questions I have. What else do you think we would want to know about your experiences with the program based on our conversation today?

CL2. I want to make sure we get you your check. Can I confirm your name, its spelling, and the address we will send the check to?

CL3. Finally, we would love to talk with you again in a year. Would it be OK to call you then?

1. (Yes)
2. (No)
3. (Maybe)

Thank you for your time.

### 4.1.3. Group C: On the EUC list and has completed a few projects

#### Introduction

Thank you for taking the time to speak with me today. The SBW evaluation team is currently conducting a process evaluation of [IOU's] Energy Upgrade California's Whole House Rebate Program (I'll call it the EUC program). In appreciation for your time, we are offering you a \$150 incentive to speak with us. We'd like to ask you some questions about your company and the program that will take about 40 minutes to cover. Your individual responses will remain confidential in our report and will not be tied to your name or your company name.

Can we please speak with [CONTACT NAME] or the person within your company that is familiar with the program?

[CONTINUE WITH CORRECT PERSON, REPEAT INTRO AS NEEDED]

[TERMINATE IF NO ONE IN THE COMPANY FITS DESCRIPTION]

Before starting the survey, we have to ask two questions to make sure you qualify.

#### Screener

S1. First, our records indicate that your company has submitted some projects to receive rebates from the EUC Program. Is that correct?

1. (Yes)
2. (No) [TRY TO CONTINUE WITH GROUP B INTERVIEW, OTHERWISE THANK AND TERMINATE]
98. (Don't Know) [THANK AND TERMINATE]

O.k., you qualify for this survey. Now we can get started.

#### Contractor Background

C1. Can you describe the types of services you provide to customers?

1. HVAC
2. Building audits and testing
3. Windows
4. Insulation
5. Home remodeling
6. New home construction
0. Other (Specify) \_\_\_\_\_

C2. How many employees does your company have serving SCE territory? (If contractor does not know, ask, "Generally speaking about how many of your employees serve southern California?)

- a. And how many of those employees work on retrofitting homes? [IF NEEDED: AS OPPOSED TO ANY STAFF YOU MAY HAVE THAT IS DEDICATED TO SALES OR ADMINISTRATION]

C3. How many employees does your company have serving PG&E territory? (If contractor does not know, ask, "Generally speaking about how many of your employees serve northern California?)

- a. And how many of those employees work on retrofitting homes? [IF NEEDED: AS OPPOSED TO ANY STAFF YOU MAY HAVE THAT IS DEDICATED TO SALES OR ADMINISTRATION]

### **BPI Certification**

B1. Is your company accredited by BPI?

- a. [IF NO] Can you tell me why it isn't?  
b. [IF YES] Did you receive financial aid from an outside source to do so?

B2. How many BPI certified individuals does your company have in SCE territory?

B3. How many BPI certified individuals does your company have in PG&E territory?

B4. What role(s) do these BPI certified personnel play relative to EUC installations and procedures? (CHECK ALL THAT APPLY)

1. Perform combustion appliance safety testing
2. Perform the EUC installations and procedures themselves
3. Teach others the appropriate procedures
4. Assure quality of others' EUC work
5. Perform test in and test out
6. Conduct energy modeling
7. Other (please specify) \_\_\_\_\_

B5. What is your opinion of the BPI approach? Why do you say that?

### **Program Impressions and Barriers**

PA1. Our records indicate that you have submitted a few projects through the program so far. Can you explain why your company has not submitted a larger volume of projects through the program?

PA2. The program is interested in finding ways to encourage contractors to submit more jobs through the program. Please tell me if any of the following are reasons for why your company has not yet submitted many jobs to [IOU] in the program so far? [YES, NO, DK FOR EACH BELOW]

- a. The paperwork required
- b. The training required
- c. The availability of local trainings
- d. Not sure if the program will be around for a long time
- e. Rebate processing time
- f. The incentives are not high enough

- g. The sales and marketing required
- h. The necessary tools needed to do the assessment and upgrade work

PA3. Are there any other reasons for why your company has not submitted a greater number of jobs that we haven't covered?

- a. [IF YES] Please describe these other reasons.

PA4. What do you think the utility could do or say to help you submit more jobs through the program?

PA5. Have you completed any home energy assessments or audits outside of the program in the last year?

- a. [IF YES] How many home assessments have you done outside of the program so far?
- b. Did you use the BPI (Building Performance Institute) protocol or some other assessment protocol?
- c. Among these customers, about what percentage would have qualified for program rebates based on potential savings indicated by the assessments?

PA6. How many home energy assessments or audits have you completed as part of the program in the last year?

- a. Did any of those turn into JRTs and Reservation submittals?
- b. If not, why not?

PA7. On average, about how many customers do you contact before you are able to complete one energy assessment?

- a. Do you offer a free in-home walk-through, or do you have the homeowner commit some money to the cost of the assessment?

CB4. About what percentage of assessments don't go forward due to lack of financing. About how many jobs does this represent?

CB5. We understand that these projects are typically expensive for a customer. How do you think program-based financing could best be structured to make customers more likely to proceed with the job after an assessment?

- a. who would receive the financing? Contractor or customer?
- b. what would be the terms?

PA8. [ASK IF SCE] Are you aware of Los Angeles County's participation in the Energy Upgrade program?

a. [IF YES] Were you aware of the following LA County EUC program components before this call? [YES, NO, DK FOR EACH BELOW]

1. Additional incentives of \$1000-\$4000 on top of the utility incentives
2. Scholarships to reimburse you for training certifications
3. 2% financing for homeowner energy upgrades

4. Regular program updates such as e-blasts and newsletters
5. TV, radio, and print ads drumming up homeowner demand

PA9. [IF SCE] Have you heard of the “flex path”?

1. [IF YES] What do you know about it? How does it compare to the basic and advanced packages?

### **Contractor Recruiting, Training, and Mentoring**

R1. How many of your employees attended the EUC Participation Workshop?

- a. [ASK IF > 1] After attending the Participation Workshop, did you feel that your organization was prepared to participate in the EUC program?
- b. [IF NO] Why not?

R2. How many of your employees attended the 3-day Basic Path training offered by [IOU]?

- a. [ASK IF > 1] After attending Basic Path training, did you or your staff feel prepared to perform the tasks required for the Basic Upgrade Package?
- b. [IF NO] Why not?

R3. What training did your BPI certified personnel complete to help them obtain the certification?

- a. Who sponsored this training?
- b. How many days of training did this involve?
- c. Did you receive a scholarship or a loan to finance the training?

R4. Have any of your staff who are not BPI certified received training that would help prepare them to implement EUC measures and procedures? (Such as: attic insulation, duct sealing, air sealing, etc.)

- a. [IF YES] What training did they receive?
- b. [IF YES] Did they receive a scholarship or a loan to finance the training?

R5. What types of employees are responsible for the EnergyPro software modeling required for the program? [PROBE FOR JOB TITLES SUCH AS GENERAL MANAGERS, OWNERS, ETC.]

R6. Did anyone in your company use EnergyPro or any other home energy modeling software before participating in the program?

[IF ANOTHER SOFTWARE] Which one?

R6a. Have you received instruction on how to use the EnergyPro software program?

- a. [IF YES] On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the EnergyPro instruction you received?
- b. [IF NO] Why not?

R7. (SCE Only) Did you receive training on how to size HVAC equipment based on the expected energy use and size of the home?

a. [IF YES] On a scale of 0-10 with 0 being not at all and 10 being very much, how much did you benefit from this training?

R8. (SCE ONLY) Are you currently participating in SCE's Energy Star Residential HVAC Quality Installation Program (QI)?

R9. Have you attended any BPI training at [IOU] Energy Education Centers? (For example: PG&E's Pacific Energy Center in San Francisco, PG&E's Stockton facility, SCE's Energy Education Center in Irwindale or Tulare)

- a. [IF YES] Did you complete the classroom training?
- b. [IF YES] Did you complete the field training?
- c. [IF YES] Have you completed your first job?

R10. Have you received any mentoring related to the EUC program?

a. [IF YES] Which type(s) did you receive? [YES OR NO TO EACH BELOW]

1. Field / Data Collection
2. JRT (Job Reporting Template)/ Job Processing
3. Energy Pro software
4. Mentoring received during onsite Quality Control inspection

[ASK FOR EACH TYPE OF MENTORING RECEIVED]

b. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the [INSERT FOR EACH YES IN R10a 1-4] mentoring you received?

R11. What other types of EUC-related training would benefit you or your staff?

R12. Do you or your company have an interest in getting additional training on how to best market your company and its services?

- a. [IF NO] Why not?

### **Sub-contracting**

SC1. Do you sub-contract the rebate application paperwork to another entity?

- a. [IF YES] Why?

SC2. Do you sub-contract any part of the BPI energy assessment out to another entity?

- a. [IF YES] Why?
- b. Which portion of the BPI energy assessment is contracted?
  1. Sales
  2. Admin
  3. Combustion Appliance testing
  4. Other (Specify) \_\_\_\_\_
- c. Is this for all jobs, advanced and basic package alike?

SC3. Do you sub-contract installation of any of the possible retrofit measures to another entity?

(e.g. HVAC, Lighting, Painting, Windows and Doors, Roofing, Insulation, Plumbing)

a. [IF YES] Why?

B. Which measures are contracted out? [MULTIPLE RESPONSE]

1. HVAC
2. Lighting
3. Painting
4. Windows
5. Doors
6. Roofing
7. Insulation
8. Plumbing
9. Other (Specify) \_\_\_\_\_

SC4. Who pulls the permits for the jobs, when needed?

a. General

b. Specialty contractor

### **EnergyPro**

E1. Do you think EnergyPro covers the major opportunities for energy efficiency?

a. [IF NOT] Why not?

E2. Do you think EnergyPro is accurate in its estimates?

a. [IF NOT] Why not?

E3. What do you think are the main pros and cons to using EnergyPro?

E4. Does your company use any other software programs to model estimated energy usage outside of the EUC program?

### **Customer Sales/Marketing**

CS1. Has your company been actively promoting the program to new or existing customers?

a. [IF NOT] Why not? [SKIP TO CB1]

b. [IF SO] Please describe who you have been promoting the program to.

CS2. What marketing has your company done to get customers interested in a EUC retrofit?

a. What marketing materials do you use?

b. Where did you get the marketing materials?

c. What types of marketing materials did you find most effective?

d. [ASK IF SCE] Have you utilized any LA County or QI Program co-op marketing funds?

CS3. What sales tools do you use to present information to prospective customers?

CS4. What types of messages seem to motivate customers to get the work done? [PROBE FOR: SAVING ENERGY, SAVING MONEY, COMFORT, SAFETY, HEALTH] Is there a combination of messages that is especially effective?

CS4. Would audit subsidies help close a retrofit sale?

- a. Why yes or no

CS5. Have you used other programs in combination with EUC to help sell the job?

- a. [IF YES] What other programs?

CS6. Have any customers come to you inquiring about the program?

- a. Where do your customers typically hear about the program?
- b. How effective is the EUC web site in generating customer contacts?

CS7. In your opinion, what types of advertising or marketing are the most effective in generating customer interest in EUC?

#### **Contractor Participation**

C1. Is there anything that [IOU] could do to help you complete more jobs through the program?

C2. Do you know of any financing sources for customers?

- a. [IF YES] Do you refer customers directly to those financing sources?
- b. Do you think this helps to sell the program?

CP4. About how long does it take to receive final payment from the customer for a job after it is completed?

CP5. Do you currently float the rebate?

- a. [IF YES] Do you think this is helpful in recruiting customers to the program?
- b. [IF NO] Would you do this if you had financing to help with it?
- c. Would you be interested receiving this kind of loan from [IOU]?
- d. Do you think it would help with recruiting customers to be able to float the rebate (with financing)?

#### **Customer Participation Barriers**

CB1. What do you think keeps customers from participating in the program in general?

CB2. What do you think are the top three reasons customers decide not to move forward from the energy assessment to a retrofit?

CB4. What do you think motivates customers to participate in the program?

CB3. Do you have any ideas as to how the program can get these customers to move forward?

## Market Effects

ME1. Did you learn any new job skills from the program?

- a. [IF YES] What skills did you learn?

ME2. Did you or your company hire additional employees as a result of the program?

- a. [IF YES] Approximately how many new employees were hired?
- b. Did these employees receive EUC training (before or after they were hired)?
- c. What is their expected duration of employment? (3 months, 6 months, etc.)
- d. Do you do the EUC work through a special department of your company, or is it an integral part of your operations?

ME3. Are you or your company planning to add more staff as a result of program?

- a. [IF YES] Approximately how many are you planning to add?
- b. Will these employees be EUC certified?
- c. What is their expected duration of employment? (3 months, 6 months, etc.)

ME4. Have you or your company had to lay off any employees as a result of a lack of demand for the program

- a. [IF YES] Approximately how many were laid off?

ME5. Would you say that the number of audits you complete are increasing or decreasing?

1. (Increasing)
2. (Decreasing)
3. (No Change)

ME6. Do you have a sense that in the next three months the number of audits you complete are going to increase or decrease, if at all?

1. (Increase)
2. (Decrease)
3. (No Change)

ME7. How many customers that purchased EUC rebated measures probably would have purchased the measures anyway if the program hadn't existed? Would you say ALL, MANY, SOME, or NONE?

ME8. Are customers generally installing the EUC rebated measures as part of larger retrofit or remodeling projects?

ME9. Have any of your EUC projects been inspected by anyone working for the EUC program?

- a. [IF YES] What, if anything, did you learn through the inspection process?
- b. What, if anything, have you applied or will you apply to subsequent projects that you learned about through the inspection process?

### **Program Satisfaction**

I'm going to ask you a series of questions that are intended to determine your satisfaction with the EUC program.

PS1. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with:

- a. Communications with the utilities about program requirements
- b. Communications with local government about program requirements
- c. The paperwork requirements for the program
- d. The Energy Pro modeling software
- e. Marketing support from the local government whose jurisdiction you most often work
- f. Marketing support from the utility
- g. Training offered by the program
- h. Program incentives
- i. Additional local government incentives
- j. Program measure installation requirements
- k. Program overall

[FOR EACH PS1a-g < 5]

PS2. Why do you give that rating?

PS3. What would you say are the positive features of the program overall?

PS4. What would you say are the biggest problems of the program overall?

PS5. Do you have any suggestions for how [IOU] could solve these problems?

PS5. How do you feel about local government's involvement in the program overall?

PS6. How can the program make the rebate process easier/faster for you?

### **Program Design**

PD1. What do you see as the strengths of the basic upgrade package of the program?

PD2. What do you see as the weaknesses of the basic upgrade package?

PD3. Could the basic upgrade package be improved in any way?

PD4. What do you see as the strengths of the advanced upgrade package of the program?

PD5. What do you see as the weaknesses of the advanced upgrade package?

PD6. Could the advanced upgrade package be improved in any way?

- a. [IF YES] How?
- b. [IF NO] Why not?

PD7. Would you prefer to use software other than EnergyPro for modeling?

- a. [IF YES] What?

PD7. In the future, would you be willing to float the rebate, i.e. discount the job to the customer and then have the rebate come to you?

- a. [IF NO] Why not?
- b. [IF YES] What terms would make this arrangement acceptable to you?
- c. [IF YES] Please describe the impact, if any, this might have on the number of jobs you could complete.

#### **Inter Contractor Conversation**

ICC1. Have you talked to other contractors outside of your company about the EUC program?

- a. [IF YES] What is the nature of those conversations?

Probe for:

Frequent topics, issues, questions, or concerns

#### **AKA-B**

I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means Completely agree, please tell me how much you agree with each statement.

[NOTE TO INTERVIEWER: This first set of AKA-B questions have to do with the contractor's professional practice and attitudes.

AK1. The comfort of a home that has sealing around windows and doors, insulated walls and attics, insulated hot water systems, and all high-efficiency appliances would be significantly greater than that for a home without these features.

AK2. The energy costs of a home that has these features would be significantly less than one that does not.

AK3. Household electricity use has an impact on the environment.

AK4. I am concerned that global climate change will increase if homeowners do not make their homes more energy efficient.

AK5. It is my responsibility to highlight the potential financial savings that can result from energy assessments and retrofits to my customers.

AK6. It is not my responsibility to help the environment by encouraging my customers to save energy.

AK7. I intend to promote energy efficiency to my customers.

AK8. I very often encourage my customers to do a comprehensive retrofit of their homes to reduce energy use and increase comfort.

[NOTE TO INTERVIEWER: This next set of AKA-B questions has to do with the contractor's personal practice and attitudes.]

AK9. I often worry that the cost of energy for my *own* home will increase.

AK10. I am very concerned about how energy use affects the environment.

AK11. I have to take the lead in my *own* household if we're going to keep our utility bills down.

AK12. It is not my responsibility to use as little energy as possible to help the environment.

AK13. I intend to conserve on electricity consumption in my *own* home this summer.

### **Closing**

CL1. Those are all the questions I have. What else do you think we would want to know about your experiences with the program based on our conversation today?

CL2. I want to make sure we get you your check. Can I confirm your name, its spelling, and the address we will send the check to?

CL3. Finally, we would love to talk with you again in a year. Would it be OK to call you then?

1. (Yes)
2. (No)
3. (Maybe)

Thank you for your time.

## **4.1.4. Group D: On the EUC list and has completed many projects & Group E: David Energy Pilot**

### **Introduction**

Thank you for taking the time to speak with me today. The SBW evaluation team is currently conducting a process evaluation of [IOU's] Energy Upgrade California's Whole House Rebate Program (I'll call it the EUC program). In appreciation for your time, we are offering you a \$150 incentive to speak with us. We'd like to ask you some questions about your company and the program that will take about 40 minutes to cover. Your individual responses will remain confidential in our report and will not be tied to your name or your company name.

Can we please speak with [CONTACT NAME] or the person within your company that is familiar with the program?

[CONTINUE WITH CORRECT PERSON, REPEAT INTRO AS NEEDED]

[TERMINATE IF NO ONE IN THE COMPANY FITS DESCRIPTION]

Before starting the survey, we have to ask one question to make sure you qualify.

### **Screener**

S1. Our records indicate that your company has submitted several projects to receive rebates from the EUC program. Is that correct?

1. (Yes)
2. (No) [TRY TO CONTINUE WITH GROUP B INTERVIEW, OTHERWISE THANK AND TERMINATE]
98. (Don't Know) [THANK AND TERMINATE]

O.k., you qualify for this survey. Now we can get started.

### **Contractor Background**

C1. Can you describe the types of services you provide to customers?

1. HVAC
2. Building audits and testing
3. Windows
4. Insulation
5. Home remodeling
6. New home construction
0. Other (Specify) \_\_\_\_\_

C2. How many employees does your company have serving SCE territory? (If contractor does not know, ask, "Generally speaking about how many of your employees serve southern California?)

a. And how many of those employees work on retrofitting homes? [IF NEEDED: AS OPPOSED TO ANY STAFF YOU MAY HAVE THAT IS DEDICATED TO SALES OR ADMINISTRATION]

C3. How many employees does your company have serving PG&E territory? (If contractor does not know, ask, "Generally speaking about how many of your employees serve northern California?)

a. And how many of those employees work on retrofitting homes? [IF NEEDED: AS OPPOSED TO ANY STAFF YOU MAY HAVE THAT IS DEDICATED TO SALES OR ADMINISTRATION]

### **BPI Certification**

B1. Is your company accredited by BPI?

- a. [IF NO] Can you tell me why it isn't?
- b. [IF YES] Did you receive financial aid from an outside source to do so?

B2. How many BPI certified individuals does your company have in SCE territory?

B3. How many BPI certified individuals does your company have in PG&E territory?

B4. What role(s) do these BPI certified personnel play relative to EUC installations and procedures? (CHECK ALL THAT APPLY)

1. Perform combustion appliance safety testing
2. Perform the EUC installations and procedures themselves
3. Teach others the appropriate procedures
4. Assure quality of others' EUC work
5. Perform test in and test out
6. Conduct energy modeling
7. Other (please specify) \_\_\_\_\_

B5. What is your opinion of the BPI approach? Why do you say that?

### **Contractor Recruiting, Training, and Mentoring**

R1. How many of your employees attended the EUC Participation Workshop?

- a. [ASK IF > 1] After attending the Participation Workshop, did you feel that your organization was prepared to participate in the EUC program?
- b. [IF NO] Why not?

R2. How many of your employees attended the 3-day Basic Path training offered by [IOU]?

- a. [ASK IF > 1] After attending Basic Path training, did you or your staff feel prepared to perform the tasks required for the Basic Upgrade Package?
- b. [IF NO] Why not?

R3. What training did your BPI certified personnel complete to help them obtain the certification?

- a. Who sponsored this training?
- b. How many days of training did this involve?
- c. Did you receive a scholarship or a loan to finance the training?

R4. Have any of your staff who are not BPI certified received training that would help prepare them to implement EUC measures and procedures? (Such as: attic insulation, duct sealing, air sealing, etc.)

- a. [IF YES] What training did they receive?
- b. [IF YES] Did they receive a scholarship or a loan to finance the training?

R5. What types of employees are responsible for the EnergyPro software modeling required for the program? [PROBE FOR JOB TITLES SUCH AS GENERAL MANAGERS, OWNERS, ETC.]

R6. Did anyone in your company use EnergyPro or any other home energy modeling software before participating in the program?

[IF ANOTHER SOFTWARE] Which one?

R6a. Have you received instruction on how to use the EnergyPro software program?

- a. [IF YES] On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the EnergyPro instruction you received?
- b. [IF NO] Why not?

R7. (SCE Only) Did you receive training on how to size HVAC equipment based on the expected energy use and size of the home?

- a. [IF YES] On a scale of 0-10 with 0 being not at all and 10 being very much, how much did you benefit from this training?

R8. (SCE ONLY) Are you currently participating in SCE's Energy Star Residential HVAC Quality Installation Program (QI)?

R9. Have you attended any training at [IOU] Energy Education Centers? (For example: PG&E's Pacific Energy Center in San Francisco, PG&E's Stockton facility, SCE's Energy Education Center in Irwindale or Tulare)

- a. [IF YES] Did you complete the classroom training?
- b. [IF YES] Did you complete the field training?
- c. [IF YES] Have you completed your first job?

R10. Have you received any mentoring related to the EUC program?

- a. [IF YES] Which type(s) did you receive? [YES OR NO TO EACH BELOW]
  1. Field / Data Collection
  2. JRT (Job Reporting Template)/ Job Processing
  3. Energy Pro software

4. Mentoring received during onsite Quality Control inspection

[ASK FOR EACH TYPE OF MENTORING RECEIVED]

b. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the [INSERT FOR EACH YES IN R10a 1-4] mentoring you received?

R11. What other types of EUC-related training would benefit you or your staff?

R12. Do you or your company have an interest in getting training on how to best market your company and its services?

a. [IF NO] Why not?

### **Sub-contracting**

SC1. Do you sub-contract the rebate application paperwork to another entity?

a. [IF YES] Why?

SC2. Do you sub-contract any part of the BPI energy assessment out to another entity?

a. [IF YES] Why?

b. Which portion of the BPI energy assessment is contracted?

1. Sales
2. Admin
3. Combustion Appliance testing
4. Other (Specify) \_\_\_\_\_

c. Is this for all jobs, advanced and basic package alike?

SC3. Do you sub-contract installation of any of the possible retrofit measures to another entity?

(e.g. HVAC, Lighting, Painting, Windows and Doors, Roofing, Insulation, Plumbing)

a. [IF YES] Why?

B. Which measures are contracted out? [MULTIPLE RESPONSE]

1. HVAC
2. Lighting
3. Painting
4. Windows
5. Doors
6. Roofing
7. Insulation
8. Plumbing
9. Other (Specify) \_\_\_\_\_

SC4. Who pulls the permits for the jobs, when needed?

- a. General
- b. Specialty contractor

### **EnergyPro**

E1. Do you think EnergyPro covers the major opportunities for energy efficiency?

a. [IF NOT] Why not?

E2. Do you think EnergyPro is accurate in its estimates?

a. [IF NOT] Why not?

E3. What do you think are the main pros and cons to using EnergyPro?

E4. Does your company use any other software programs to model estimated energy usage outside of the EUC program?

### **Customer Sales/Marketing**

CS1. Has your company been actively promoting the program to new or existing customers?

a. [IF NOT] Why not? [SKIP TO CB1]

b. [IF SO] Please describe who you have been promoting the program to.

CS2. What marketing has your company done to get customers interested in a EUC retrofit?

a. What marketing materials do you use?

b. Where did you get the marketing materials?

c. What types of marketing materials did you find most effective?

d. [ASK IF SCE] Have you utilized any LA County or QI Program co-op marketing funds?

CS3. What sales tools do you use to present information to prospective customers?

CS4. What types of messages seem to motivate customers to get the work done? [PROBE FOR: SAVING ENERGY, SAVING MONEY, COMFORT, SAFETY, HEALTH] Is there a combination of messages that is especially effective?

CS5. Have you used other programs in combination with EUC to help sell the job?

a. [IF YES] What other programs?

CS5. What do you think are the best ways to engage customers about participating in the program?

CS6. Have any customers come to you inquiring about the program?

a. Where do your customers typically hear about the program?

b. How effective is the EUC web portal in generating customer contacts?

CS7. In your opinion, what types of advertising or marketing are the most effective in generating customer interest in EUC?

CS8. About what percentage of your leads come from the EUC website, and about what percentage from other sources (referrals, local advertising, etc)?

CS8. On average, about how many customers do you contact before you are able to complete one energy assessment?

CS4. Would audit subsidies help close a retrofit sale?

CS9. On average, about how many customers do you contact before you are able to complete one retrofit?

CS10. On average, how many days pass from your first contact with the customer and completion of the retrofit?

- a. How about from first contact to completing the energy assessment?
- b. Following an assessment, what is the average number of days you spend in the customer's home to complete installation work

### **Customer Participation Barriers & Drivers**

CB1. What do you think keeps customers from participating in the program?

CB2. What do you think keeps customers from participating in getting retrofit work done after the energy assessment?

CB3. Do you have any ideas as to how the program can get these customers to move forward?

CB4. What do you think motivates customers to participate in the program?

CB5. We understand that these projects are typically expensive for a customer. How do you think program-based financing could best be structured to make customers more likely to proceed with the job after an assessment?

- a. who would receive the financing? Contractor or customer?
- b. what would be the terms?

### **Conversion Rates**

CR1. How many energy assessments have you done as part of the program so far?

CR2. What percentage of these customers could qualify for program rebates if they installed the recommended measures?

CR3. Among those that would save enough to qualify, what percentage decided not to move forward with the retrofit?

[ASK IF CR3 < 100%]

CR4. What do you think are the top three reasons customers decide not to move forward from the energy assessment to a retrofit?

CR5. Approximately what percentage of energy assessments or audits turn into retrofits?

- a. Do you offer a free in-home walk-through, or try to get the homeowner to commit to the assessment at a cost?

CR6. In the last 12 months, would you say that the number of energy assessments turning into retrofits is increasing, decreasing, or staying the same?

- a. Increasing
- b. Decreasing
- c. Staying the same

CR7. Why do you say that?

CB4. About what percentage of assessments don't go forward due to lack of financing. About how many jobs does this represent?

CB5. How do you think program-based financing would best be structured to help move assessments into retrofits?

- a. who would receive the financing? Contractor or customer?
- b. what would be the terms?

PA8. [ASK IF SCE] Are you aware of Los Angeles County's participation in the Energy Upgrade program?

a. [IF YES] Were you aware of the following LA County EUC program components before this call? [YES, NO, DK FOR EACH BELOW]

1. Additional incentives of \$1000-\$4000 on top of the utility incentives
2. Scholarships to reimburse you for training certifications
3. 2% financing for homeowner energy upgrades
4. Regular program updates such as e-blasts and newsletters
5. TV, radio, and print ads drumming up homeowner demand

PA9. [IF SCE] Have you heard of the “flex path”?

1. [IF YES] What do you know about it? How does it compare to the basic and advanced packages?

### **Contractor Participation**

CP1. Is there anything that [IOU] could do to help you asses more homes through the program?

CP2. Have you conducted a qualifying retrofit without filing for the EUC rebate?

- a. [IF YES] Why didn't you file?

CP3. Do you know of any financing sources for customers?

- a. [IF YES] Do you refer customers directly to those financing sources?
- b. [IF YES]. Do you think this helps to sell the program?

CP4. About how long does it take to receive final payment from the customer for a job after it is completed?

CP5. Do you currently float the rebate?

- a. [IF YES] Do you think this is helpful in recruiting customers to the program?
- b. [IF NO] Would you do this if you had financing to help with it?
- c. Would you be interested receiving this kind of loan from [IOU]?
- d. Do you think it would help with recruiting customers to be able to float the rebate (with financing)?

CP6. According to our records, your organization has completed a higher-than-average number of EUC Projects compared to other participating contractors. Why do you think that this is the case?

### **Market Effects**

ME1. Did you learn any new job skills from the program?

- a. [IF YES] What skills did you learn?

ME2. Did you or your company hire additional employees as a result of program?

- a. [IF YES] Approximately how many new employees were hired?
- b. Were these employees EUC certified?
- c. What is their expected duration of employment? (3 months, 6 months, etc.)
- d. Do you offer the EUC program through a special sector or specialized unit of your company, or is it an integral part of your operations?

ME3. Are you or your company planning to add more staff as a result of program?

- a. [IF YES] Approximately how many are you planning to add?
- b. Will these employees be EUC certified?
- c. What is their expected duration of employment? (3 months, 6 months, etc.)

ME4. Have you or your company had to lay off any employees as a result of a lack of demand for the program

- a. [IF YES] Approximately how many were laid off?

ME6. Approximately how many energy assessments do you complete in an average month?

ME7. Would you say that the number of audits you complete are increasing or decreasing?

1. (Increasing)
2. (Decreasing)
3. (No Change)

ME6. Would audit subsidies help close a retrofit sale?

Why yes or no

ME8. Do you have a sense that in the next three months the number of audits you complete are going to increase or decrease, if at all?

1. (Increase)
2. (Decrease)
3. (No Change)

ME9. How many customers that purchased EUC rebated measures probably would have purchased the measures anyway if the program hadn't existed. Would you say ALL, MANY, SOME, or NONE?

ME10. Are customers generally installing the EUC rebated measures as part of larger retrofit or remodeling project?

ME11. Have any of your EUC projects been inspected by anyone working for the EUC program?

- a. [IF YES] What, if anything, did you learn through the inspection process?
- b. What, if anything, have you applied or will you apply to subsequent projects that you learned about through the inspection process?

### **Program Satisfaction**

I'm going to ask you a series of questions that are intended to determine your satisfaction with the EUC program.

PS1. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with:

- a. Communications with the utilities about program requirements
- b. Communications with local government about program requirements
- c. The paperwork requirements for the program
- d. The Energy Pro modeling software
- e. Marketing support from the local government whose jurisdiction you most often work [FIND OUT WHICH LOCAL GOV'T THIS IS]
- f. Marketing support from the utility
- g. Training offered by the program
- h. Program incentives
- i. Additional local government incentives
- j. Program measure installation requirements
- k. Program overall

[FOR EACH PS1a-l < 5]

PS2. Why do you give that rating?

PS3. What would you say are the positive features of the program overall?

PS4. What would you say are the biggest problems of the program overall?

PS5. Do you have any suggestions for how [IOU] could solve these problems?

PS5. How do you feel about local government's involvement in the program overall?

PS6. How can the program make the rebate process easier/faster for you?

### **Program Design**

PD1. What do you see as the strengths of the basic upgrade package of the program?

PD2. What do you see as the weaknesses of the basic upgrade package?

PD3. Could the basic upgrade package be improved in any way?

PD4. What do you see as the strengths of the advanced upgrade package of the program?

PD5. What do you see as the weaknesses of the advanced upgrade package?

PD6. Could the advanced upgrade package be improved in any way?

- a. [IF YES] How?
- b. [IF NO] Why not?

PD7. Would you prefer to use software other than EnergyPro for modeling?

- a. [IF YES] what?

### **Inter Contractor Conversation**

ICC1. Have you talked to other contractors outside of your company about the EUC progam?

- a. [IF YES] What is the nature of those conversations?

Probe for:

Frequent topics, issues, questions, or concerns

### **AKA-B**

I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means Completely agree, please tell me how much you agree with each statement.

[NOTE TO INTERVIEWER: This first set of AKA-B questions have to do with the contractor's professional practice and attitudes.

AK1. The comfort of a home that has sealing around windows and doors, insulated walls and attics, insulated hot water systems, and all high-efficiency appliances would be significantly greater than that for a home without these features.

AK2. The energy costs of a home that has these features would be significantly less than one that does not.

AK3. Household electricity use has an impact on the environment.

AK4. I am concerned that global climate change will increase if homeowners do not make their homes more energy efficient.

AK5. It is my responsibility to highlight the potential financial savings that can result from energy assessments and retrofits to my customers.

AK6. It is not my responsibility to help the environment by encouraging my customers to save energy.

AK7. I intend to promote energy efficiency to my customers.

AK8. I very often encourage my customers to do a comprehensive retrofit of their homes to reduce energy use and increase comfort.

[NOTE TO INTERVIEWER: This next set of AKA-B questions has to do with the contractor's personal practice and attitudes.]

AK9. I often worry that the cost of energy for my *own* home will increase.

AK10. I am very concerned about how energy use affects the environment.

AK11. I have to take the lead in my *own* household if we're going to keep our utility bills down.

AK12. It is not my responsibility to use as little energy as possible to help the environment.

AK13. I intend to conserve on electricity consumption in my *own* home this summer.

### Closing

CL1. Those are all the questions I have. What else do you think we would want to know about your experiences with the program based on our conversation today?

CL2. I want to make sure we get you your check. Can I confirm your name, its spelling, and the address we will send the check to?

CL3. Finally, we would love to talk with you again in a year. Would it be OK to call you then?

1. (Yes)
2. (No)
3. (Maybe)

Thank you for your time.

## 4.2. Survey Frequency Tabulations

### 4.2.1. Group A: Qualified/Certified, but not on the EUC list

#### Contractor Background

C1. Can you describe the types of services you provide to customers?

C1	PG&E (n=4)	SCE (n=4)	Total (n=8)
HVAC	2	4	6
Building audits and testing	2	2	4
Windows	2	3	5
Insulation	3	1	4
Home remodeling	1	2	3
New home construction	1	2	3
Other (Specify)	1	2	3

C2. How many employees does your company have serving SCE territory?

C2	PG&E (n=4)	SCE (n=4)	Total (n=8)
0	2		2
1 – 10	1	3	4
11 – 20		1	1
21 – 30			
31 – 40			
41 – 50			
Not applicable	1		1

C3. How many employees does your company have serving PG&E territory?

C3	PG&E (n=4)	SCE (n=4)	Total (n=8)
0		1	1
1 – 10	3	3	6
11 – 20			
21 – 30			
31 – 40			
41 – 50	1		1

#### Program Impressions & Barriers to Participation

PA1. Prior to this call, had you heard of the Energy Upgrade California, or the EUC, program?

PA1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	4	8
No	0	0	0

PA1A. Where did you first hear about it?

PA1A	PG&E (n=4)	SCE (n=4)	Heard about EUC Program (n=8)
BPI Related Workshops	1		1
Alameda County Cleantech Advisory Group	1		1
BPI Training	1		1
One Stop Career Center 6-month Green Tech Contractor training	1		1
Air Quality Association newsletter		1	1
Internet research		1	1
SDG&E Training Facility		1	1
Don't know		1	1

PA1B. Have you attended a EUC workshop?

PA1B	PG&E (n=4)	SCE (n=4)	Heard about EUC Program (n=8)
Yes	4	3	7
No	0	1	1

PA1B1. What made you decide to attend a Participation Workshop?

PA1B1	Utility
"I wanted to be able to do all kinds of work that are available in my areas."	PG&E
"Wanted to be able to do EUC related jobs."	PG&E
"Curious about the program, want to take advantage of applicable jobs."	PG&E
"Part of a larger green contractor training workshop."	PG&E
"We hope that it becomes a large part of our business."	SCE
"Workshop was paid for by a state grant."	SCE
"To broaden my knowledge"	SCE

PA1C. Are you aware of the differences between the basic and advanced incentive packages offered to customers through the program?

PA1C	PG&E (n=4)	SCE (n=4)	Heard about EUC Program (n=8)
Yes	1	0	1
No	3	4	7

PA1D. Have you heard of the “flex path”?

PA1D	PG&E (n=0)	SCE (n=4)	SCE Contractor and heard about EUC Program (n=4)
Yes	0	0	0
No	0	4	4
Not applicable			

PA1D1. What do you know about it? How does it compare to the basic and advanced packages?

*Not applicable to any respondents*

PA2. What do you see as the benefits of the program?

PA2	Utility
"Rebates."	PG&E
"Easily, in quotation marks, integrated into the current disciplines that we provide our customer base. Beneficial from an environmental standpoint."	PG&E
"Create work, but that hasn't happened yet."	PG&E
"Rebates for customers."	PG&E
"This program isn't mature yet, but hopefully as it grows it will become a one-stop-shop for homeowners, multifamily, business owners, and industrial space owners. If that happens it could be very valuable, for both incentives and awareness. It would also be good for me if I can go to one place to look for all of the available rebates and incentives. It isn't like that now, but it could be. They also need to process their incentives faster."	SCE
"Lowering energy costs."	SCE
"Reduce before you produce, and the solar that we also install would go a lot further."	SCE

"Spreading knowledge about what is available."

SCE

PA3. What have you heard about the program so far from customers?

PA3A	Utility
"A couple customers asked about it, but I wasn't certified yet. They had the work done anyway and didn't want to wait for it."	PG&E
"Nothing."	SCE
"Nothing."	SCE
"The rate of return is much too long. They say "I'll be dead by the time that's paid off". No one wants to spend the extra money upfront."	SCE

PA3B. What, if anything, have you heard about the program from other contractors?

PA3B	Utility
"There is a lot of paperwork."	PG&E
"Nothing."	PG&E
"One contractor was wondering about the marketing, and if there was going to be any help with that. Customers don't know about it."	PG&E
"No one has had anything bad to say about it, including contractors who have participated in it."	PG&E
"Those customers should be more aware of it, but that it also causes a lot of red tape."	SCE
"It's a great program for EE."	SCE
"Other contractors are running into the same problem. It is a hard sell. When you putting a bid, if you want to do it "correctly" the bid will cost more. If you are bidding against other contractors that are not taking EE into account, I can't compete. Electricity and Gas in California isn't that much compared to the rest of the nation."	SCE

PA4. Have you attempted to become a [IOU]-approved contractor for the EUC program?

PA4	PG&E (n=4)	SCE (n=4)	Heard about EUC Program (n=8)
Yes	3	0	3
No	1	3	4
No Answer		1	1

PA4A. Why haven't you done that yet?

PA4A	Utility
"Waiting until I have my contractor's license. Also, I could do energy audits, but the equipment is expensive."	PG&E
"I work by referral, and my clients don't care. I've also already got a lot of certifications, all of which require continuing education and dues. I've got enough work as it is."	SCE
"I applied before and the program was full. Hopefully it has been resolved and there is more room."	SCE
"There isn't a call for it. Considering the time and money, I wouldn't get any benefit out of it."	SCE

PA4B. Can you describe any issues that you encountered while attempting to gain [IOU] approval?

PA4B	Utility
"I filled out the paperwork and dropped it off at the nearest PG&E office, but I never heard back. Then I tried calling PG&E customer service, but half of those guys didn't know what I was talking about. Finally someone did and gave me a direct line. I've sent the papers to the right place now, but that was frustrating."	PG&E
"With 45 employees the Criminal Background check causes logistical problems. They all have not had their checks, and while I expect them to pass without a problem, it takes time. That means that logically I have to make sure that I'm sending the workers out who have had checks onto jobs that require that. It adds a logistical problem."	PG&E
"No, it went smoothly (In Southern California)."	PG&E
"No. It's just paperwork."	SCE

PA5. The EUC Program is a program in California sponsored by [IOU] and local governments, that gives incentives to customers who do comprehensive retrofits at the same time such as insulation, an HVAC system, duct sealing, air sealing or new windows. The program requires that a participating contractor conduct a home energy assessment first to see if they can qualify for incentives. If they qualify, customers receive incentive amounts based upon the estimated energy savings from the home retrofit. Have you completed any jobs in the last year that might have qualified for the EUC program, but have not and will not be submitted to the EUC program?

PA5	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	2	5
No	1	2	3

PA5A. What types of retrofits have you done that you think might have qualified for the program? Which of the packages would they have qualified for? Advanced or Basic or (SCE only) Flex?

PA5A	PG&E (n=4)	SCE (n=4)	Completed jobs that qualify for EUC Program (n=8)
HVAC		1	1
HVAC, Advanced	1		1
HVAC, Basic	1		1
Roofing and insulation	1		1
Various		2	2
Not Applicable	1	1	2

PA5B. How many of each of these jobs have you done in the past year?

PA5B	Utility
"2"	PG&E
"75% of a million dollars worth of work."	PG&E
"15-20"	PG&E
"Over 100."	SCE
"30"	SCE
"4"	SCE

PA6. Are you aware of Los Angeles County's participation in the Energy Upgrade program?

PA6	PG&E (n=0)	SCE (n=4)	SCE Contractor and heard about EUC Program (n=4)

Yes	0	2	2
No	0	2	2

PA6A1-5. Were you aware of the following LA County EUC program components before this call?

(Showing # that said “yes” to program components)	SCE and aware of LA County’s participation in the EUC program (n=2)
Additional incentives of \$1000-\$4000 on top of the utility incentives	0
Scholarships to reimburse you for training certifications	1
2% financing for homeowner energy upgrades	1
Regular program updates such as e-blasts and newsletters	1
TV, radio, and print ads drumming up homeowner demand	2

PA7. The EUC program is interested in finding ways to encourage more contractors to participate. Please tell me if any of the following are reasons for why your company has not participated in the program so far?

PA7A-I (Showing # that said “yes” to barrier)	PG&E (n=4)	SCE (n=4)	Total (n=8)
Paperwork required	2	4	6
Training required	3	2	5
Availability of local trainings	3	3	6
Not sure if program will be around for a long time	1	3	4
Rebate processing time	1	2	3
The incentives are not high enough	2	3	5
The sales and marketing required	2	3	5
The reputation of the program	0	0	0
Upfront investment	2	3	5

PA8. Are there any other reasons for why your company has not participated in the program that we haven’t covered? If yes, please describe these reasons.

PA8	Utility
"No."	PG&E
"I don't feel comfortable about doing one of these jobs without mentoring; even though I am BPI certified and have gone to the EUC workshop. The training I have is	PG&E

fine, but it doesn't cover a lot off issues on the ground, like dealing with various types of appliances. Also, I'm not familiar with EnergyPro software. I know I need it, but I've never used it or been taught how to do it, even though I have been through the EUC workshop. I want to go to more trainings, but they are far away and don't occur very often."

"I expected some marketing or awareness work form the utility. I don't know how to get the word out. Also, I don't have or have training in EnergyPro. I use different software, and had never heard of Energy Pro until the BPI training." PG&E

"There isn't a lot of work out there. No one can afford anything, even with rebates [San Louis Abispo and Santa Barbara]." PG&E

"No." -SCE Contractor SCE

"My primary focus is health, not energy efficiency. Most programs recommend measures without taking into account the materials that go into them. If you build a well insulated house with the wrong materials you are just trapping people in a noxious environment." SCE

"There is no urgency or awareness." SCE

"My client base has a short term focus. If they can't pay it off in two years, they are not interested. Most people are not very knowledgeable about energy efficiency." SCE

PA9. What do you think the utility could do or say to encourage you to participate in the program?

PA9 Utility

"Inform the PG&E offices and customer service people about the program so I can get my questions answered." PG&E

"Hold more frequent and local education classes or training. Mentor me on a few jobs. You could even charge a fee to come to the contractor's office to do the training. I'm also not familiar with Energy Pro software, which I need." PG&E

"Marketing to customers and EnergyPro training." PG&E

"Educate customers." PG&E

"Share information. The utilities know who the biggest users are. They can either share that information with contractors, or go to market to those users themselves. They could also have more focus groups or round-tables with contractors like us to asks us how to get the word out, and how to improve the program." SCE

"The protocols and standards would have to include health concerns, or make the program flexible enough to allow for healthy materials." SCE

"Build Awareness." SCE

"Increase awareness and increase the incentives." SCE

PA10. Would you be interested in learning more about this program?

PA10	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	4	8
No	0	0	0

PA10A. What is the best way to reach you with more information about this program?

PA10A	PG&E (n=4)	SCE (n=4)	Total (n=8)
Email	1	2	3
Mail, Email	2		2
Phone, Email		1	1
Mail		1	1
No Answer	1		1

PA10B. Why not?

*Not applicable to any respondents*

#### AKA-B

I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means completely agree, please tell me how much you agree with each statement.

AK1. The comfort of a home that has sealing around windows and doors, insulated walls and attics, insulated hot water systems, and all high-efficiency appliances would be significantly greater than that for a home without these features.

AK1	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2			
3			
4		1	1
5		1	1
6			
7			
8	1		1
9			
10 – Completely Agree	3	2	5

AK2. The energy costs of a home that has these features would be significantly less than one that does not.

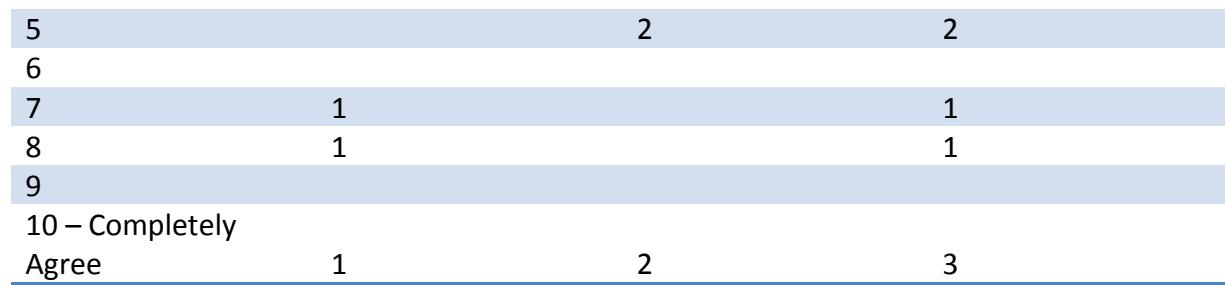
AK2	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2			
3			
4			
5	1		1
6			
7		1	1
8		1	1
9	1		1
10 – Completely Agree	2	2	4

AK3. Household electricity use has an impact on the environment.

AK3	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2			
3			
4			
5			
6			
7			
8		1	1
9			
10 – Completely Agree	4	3	7

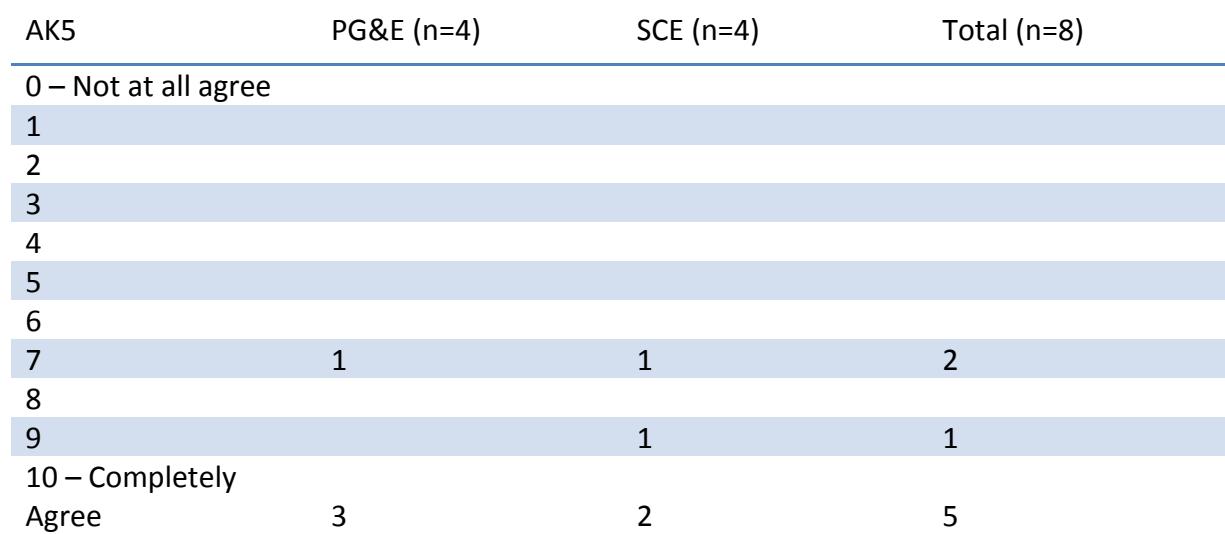
AK4. I am concerned that global climate change will increase if homeowners do not make their homes more energy efficient.

AK4	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2			
3			
4	1		1



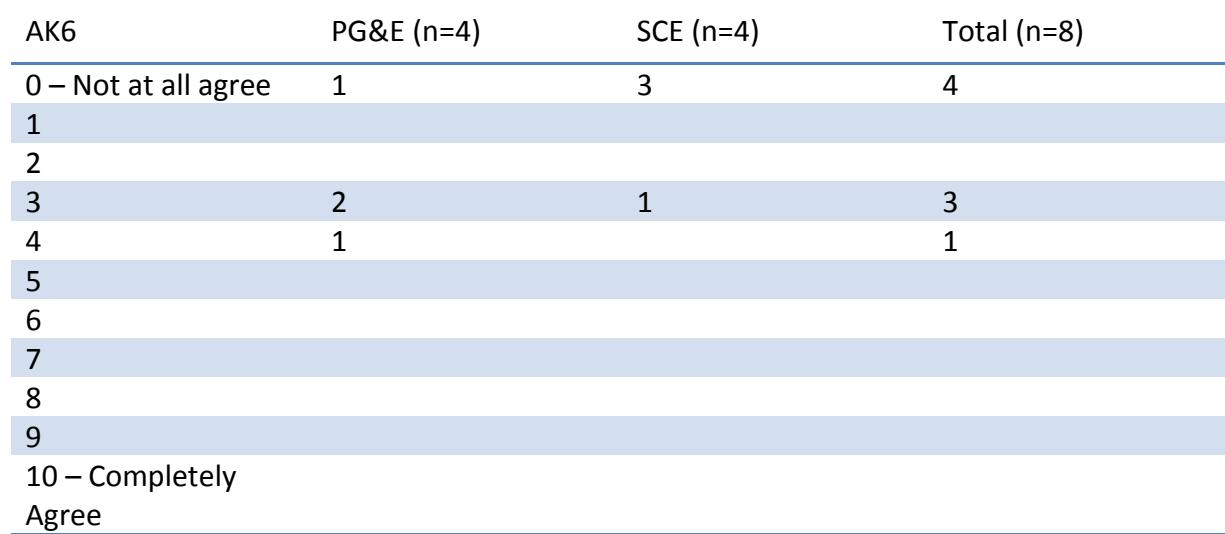
AK5. It is my responsibility to highlight the potential financial savings that can result from energy assessments and retrofits to my customers.

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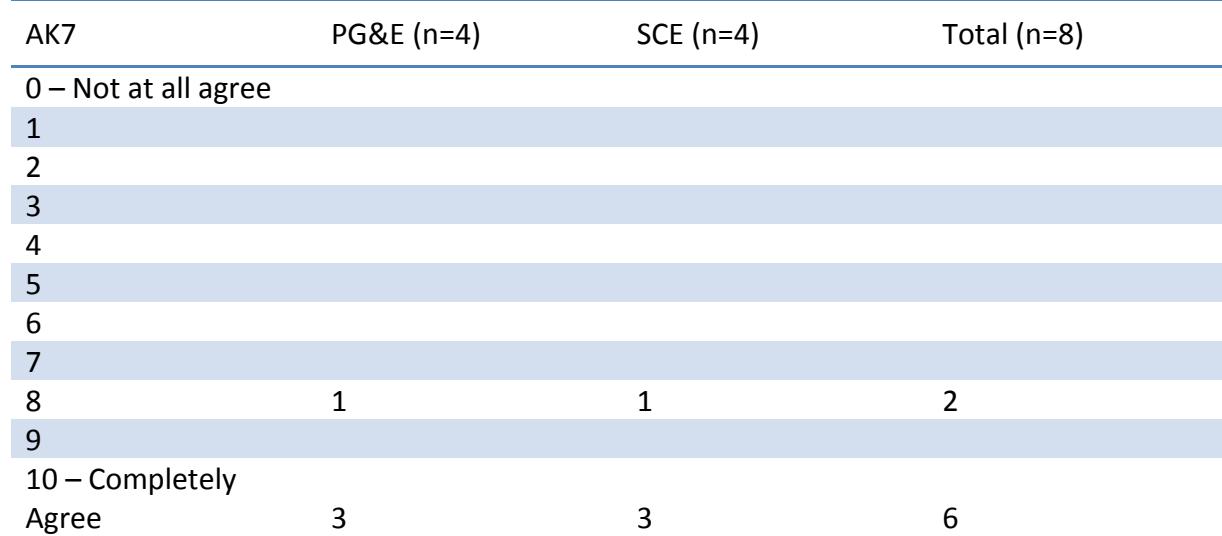


AK6. It is not my responsibility to help the environment by encouraging my customers to save energy.

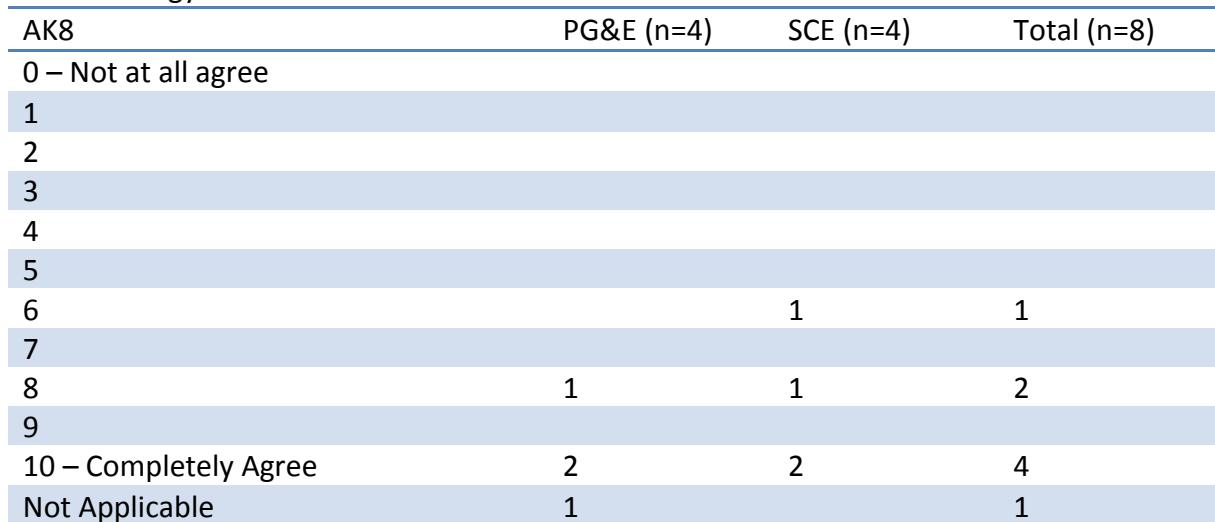
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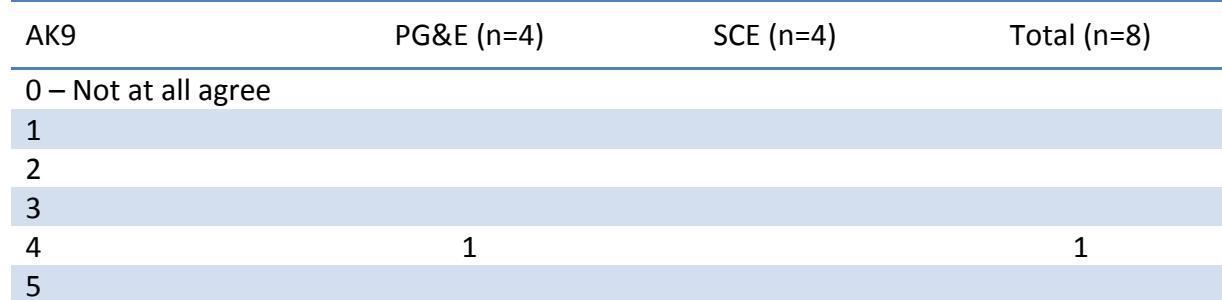
AK7. I intend to promote energy efficiency to my customers.



AK8. I very often encourage my customers to do a comprehensive retrofit of their homes to reduce energy use and increase comfort.

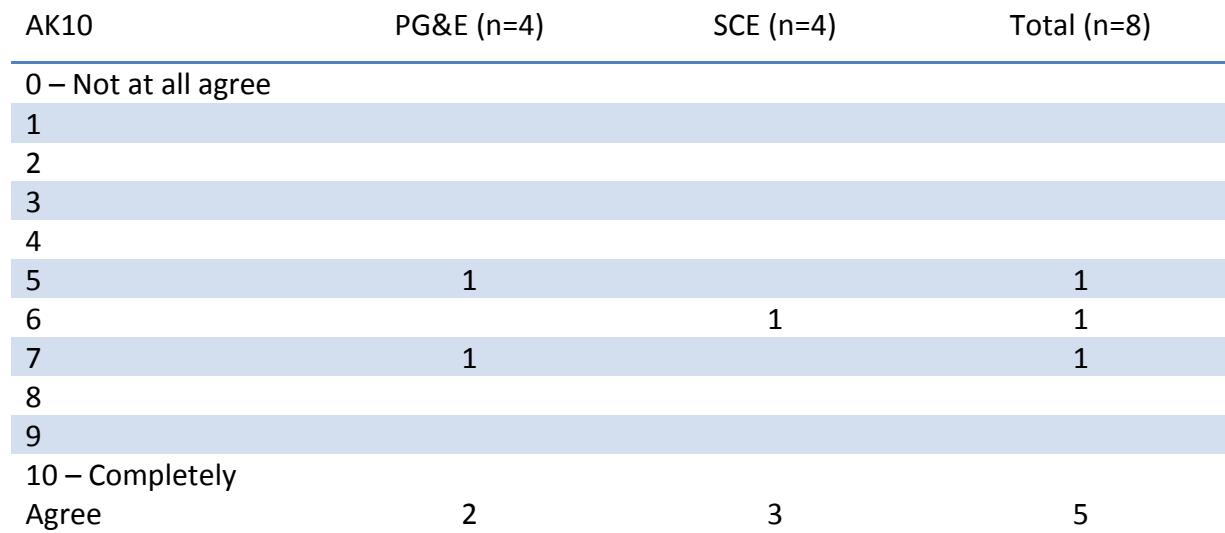


AK9. I often worry that the cost of energy for my own home will increase.

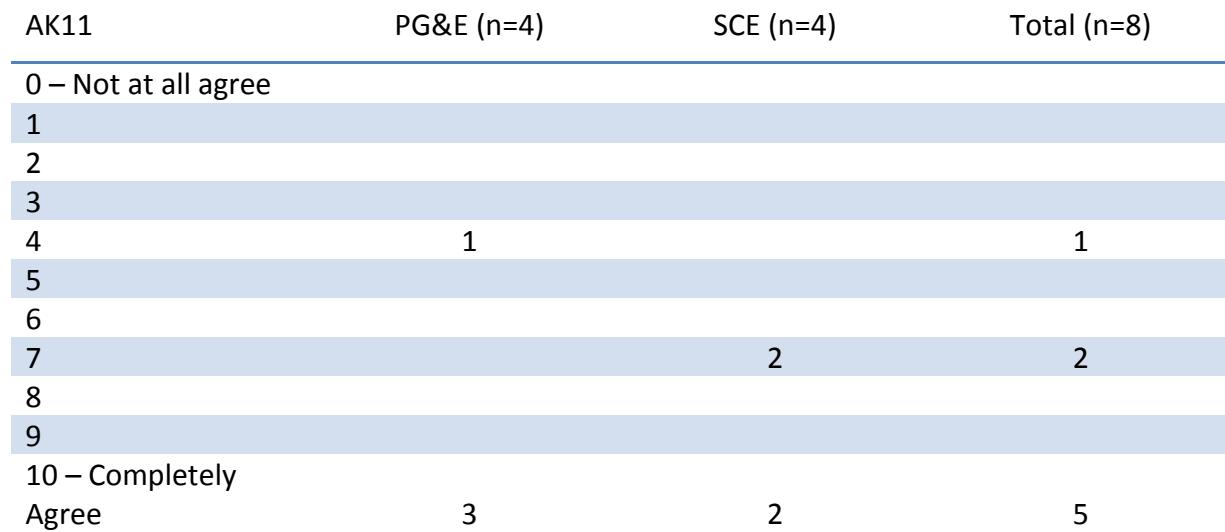




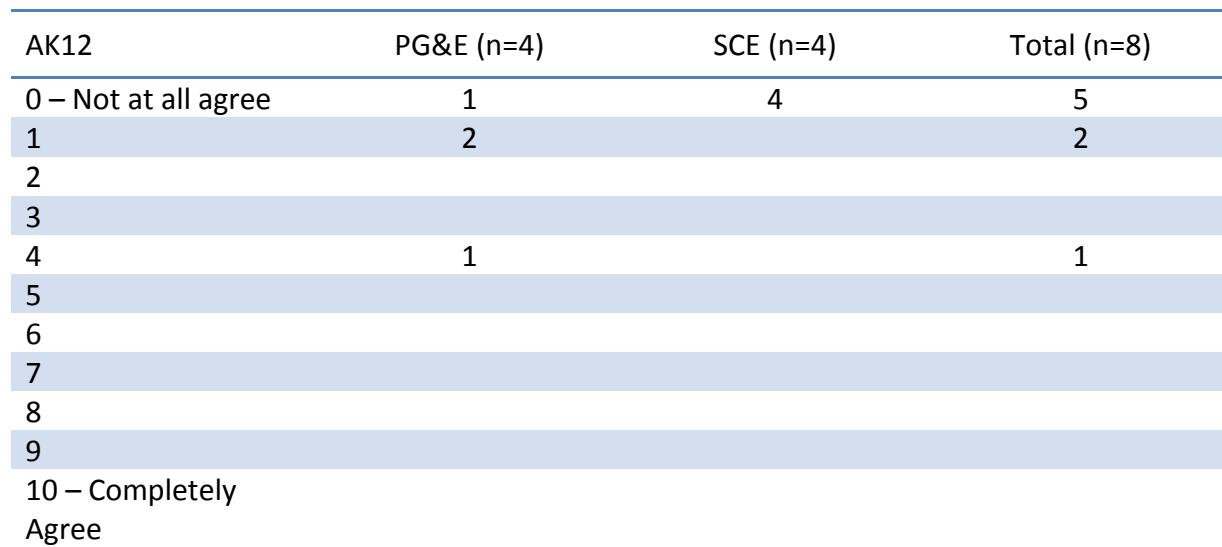
AK10. I am very concerned about how energy use affects the environment.



AK11. I have to take the lead in my own household if we're going to keep our utility bills down.

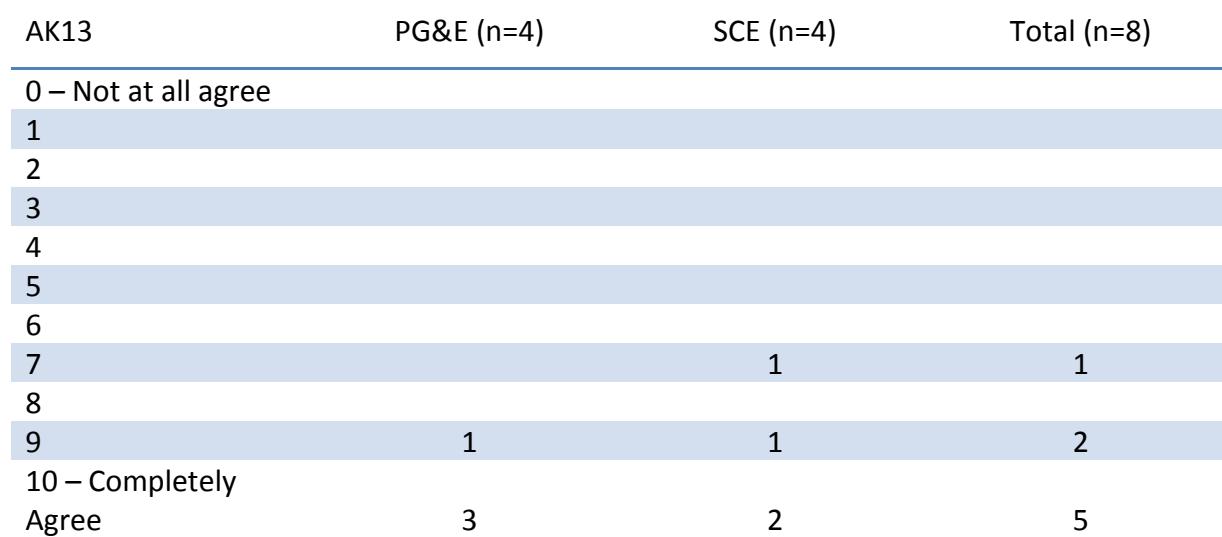


AK12. It is not my responsibility to use as little energy as possible to help the environment.



AK13. I intend to conserve on electricity consumption in my *own* home this summer.

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## Closing

CL1. Those are all the questions I have. What else do you think we would want to know about your experiences with the program based on our conversation today?

---

CL1	Utility
"Streamline the program, and make the PG&E offices and the customer service people aware of the program. This is the second time I've applied for it, because the PG&E office I dropped the paperwork off at didn't do anything with it."	PG&E
"Lets say that a building is designed for x amount of airflow, and someone comes in that alters that environment unknowingly and creates potential mold, ventilation	PG&E

problems, accelerated deterioration of building components, etc. There is nothing addressing that in the program. Also, I am not trained on Energy Pro software, which I need, and have heard might be inaccurate."

"We need the ISO to work on awareness of the program. On a daily basis I upgrade the heating system and try to get people to upgrade their duct system, and people say 'Oh, no, just replace the box'. That is a big hurdle, and the duct systems in California suck. Flexducts are often misused."

PG&amp;E

"No."

PG&amp;E

"My company's experience with LA County has not been positive. I'm looking at a customer today that has 21 properties and 8300 apartment doors. But, the amount of stress, length of time to get paid, and lack of support on their end prevents me from doing anything. There is a lot of immaturity in the business. New Raters don't really understand the process, and don't understand what their energy modeling software is telling them. They can't speak in detail to an experienced contractor. Also, the EUC program is too focused on a few major specific measures, but it ignores gas, lighting, etc. and most importantly education of the customer."

SCE

"Energy efficiency is great, but if you use materials that people are sensitive to, it can be unhealthy."

SCE

"More training programs for contractors. More marketing would be beneficial."

SCE

"Nothing."

SCE

#### **4.2.2. Group B: On the EUC list, but has not completed any projects for WH**

##### **Contractor Background**

C1. Can you describe the types of services you provide to customers? (Multiple response)

C1	PG&E (n=4)	SCE (n=4)	Total (n=8)
HVAC	3	3	6
Building audits and testing	4	2	6
Windows	4		4
Insulation	4	2	6
Home remodeling	4	1	5
New home construction	3		3
Other (Specify)	3	1	4

C2. How many employees does your company have serving SCE territory?

C2	PG&E (n=4)	SCE (n=4)	Total (n=8)
0	4		4
1 – 10		3	3
11 – 20		1	1
21 – 30			
31 – 40			
41 – 50			
Not applicable			

C3. How many employees does your company have serving PG&E territory?

C3	PG&E (n=4)	SCE (n=4)	Total (n=8)
0		3	3
1 – 10	3	1	4
11 – 20			
21 – 30	1		1
31 – 40			
41 – 50			

### BPI Certification

B1. Is your company accredited by BPI?

B1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	1	2
No	3	3	6

B1A. If no, can you tell me why?

B1A	Utility
"Not worth the time and effort."	PG&E
"Our specialty is different than what is covered by BPI accreditation."	SCE
"It is a small company. No time/staffing for full accreditation."	SCE
"Not worth it. EUC rebates are not very high in such a mild climate."	SCE

B1B. If yes, did you receive financial aid from an outside source to do so?

B1B	PG&E (n=1)	SCE (n=1)	Accredited by BPI (n=2)
Yes	0	1	1
No	1		1

B2. How many BPI certified individuals does your company have in SCE territory?

B2	PG&E (n=4)	SCE (n=4)	Total (n=8)
0	4		4
1 – 5		4	4

B3. How many BPI certified individuals does your company have in PG&E territory?

B3	PG&E (n=4)	SCE (n=4)	Total (n=8)
0		4	4
1 – 5		3	3
6 – 10	1		1

B4. What role(s) do these BPI certified personnel play relative to EUC installations and procedures?

(Showing # that said “yes” to role)	PG&E (n=4)	SCE (n=4)	Total (n=8)
Perform combustion appliance safety testing	4	3	7
Perform the EUC installations and procedures themselves	4	3	7
Teach others the appropriate procedures	4	4	8
Assure quality of others’ EUC work	4	4	8
Perform test in and test out	4	3	7
Conduct energy modeling	3	3	6
Other			0

B5. What is your opinion of the BPI approach? Why do you say that?

B5	Utility
"I like it. It isn't perfect but it is much better than nothing, which is what we had before."	PG&E
"They should set up different standards for different areas."	PG&E

"It is excellent. It sets the standard high for safety."	PG&E
"It is something I honestly believe in. BPI testing is effective but putting these measures into effect takes more than that; sales, building, expertise, etc.)"	PG&E
"It is essential. It brings in concern for health and safety, and is increasing awareness in the industry."	SCE
"It's a great program. They need to get the public more involved."	SCE
"It is great. The model works."	SCE
"It overlaps a lot with HVAC work. It is an excellent tool. It helps more people understand heat transfer, which is important."	SCE

### Program Impressions and Barriers

PA7. Please tell me if any of the following are reasons for why your company has not yet submitted any jobs to [IOU] in the program so far?

PA7A-I (Showing # that said "yes" to barrier)	PG&E (n=4)	SCE (n=4)	Total (n=8)
Paperwork required	2	1	3
Training required	1	3	4
Availability of local trainings	0	0	0
Not sure if program will be around for a long time	1	1	2
Rebate processing time	2	3	5
The incentives are not high enough	2	1	3
The sales and marketing required	2	1	3
The necessary tools needed to do the assessment and upgrade work		3	3

PA8. The program is interested in finding ways to encourage more contractors to participate. Are there any other reasons for why your company has not yet submitted any jobs to [IOU] in the program that we haven't covered?

PA8	Utility
"There is no natural gas in my service area. The vast majorities of people I encounter have propane, and so don't qualify."	PG&E
"Two reasons. We got into this just as the ABAG and CHF funds ended. Also, when those funds were available, each program required its own set of paperwork, which takes a lot of time."	PG&E
"The limited availability of local rebates. They didn't prepare the contractors, so the local rebates came and went very quickly. It made contractors look unprofessional because they were not prepared when the marketing came out."	PG&E

"We subcontract audits through Energuy, which sometimes causes delays. There is a high learning curve for the program. I needed to hire someone to do the paperwork."	PG&E
"Assessment equipment is prohibitively expensive. Also, it is a hard sell in lower income areas."	SCE
"It is a small company. I'm finding time and looking for staffing. I'm getting ready to start some marketing for it."	SCE
"Longer periods of equipment rental."	SCE

PA9. What do you think the utility could do or say to encourage you to participate in the program?

PA9	Utility
"Include propane measures."	PG&E
"Higher rebates and simpler applications."	PG&E
"One contact person for EUC customer service would be useful. As it is, there are many contacts and it is hard to find someone who knows what they are talking about on the first try."	PG&E
"Educate the customer as to why whole house retrofits are worth the cost. Make the case for health and safety."	SCE
"I would like more marketing material."	SCE
"I've done many audits, but the rebate ends up paying for the audit and not much more, since in this climate they can't save very much."	SCE

PA10. Have you completed any jobs in the last year that might have qualified for the EUC program, but have not and will not be submitted to the EUC program ?

PA10	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	2	6
No	0	2	2

PA10A. How many home assessments have you done outside of the program so far?

PA10A	PG&E (n=4)	SCE (n=2)	Completed any assessments outside the program (n=6)
0			

1 – 10	2	2	2
11 – 20	1	2	3
21 – 30	1		1

---

PA10B. Did you use the BPI (Building Performance Institute) protocol or some other assessment protocol?

PA10B	PG&E (n=4)	SCE (n=2)	Completed any assessments outside the program (n=6)
Yes	4	2	6
No			0

---

PA10C. Among these customers, about what percentage would have qualified for program rebates based on potential savings indicated by the assessments?

PA10C	PG&E (n=4)	SCE (n=2)	Completed any assessments outside the program (n=6)
0%	1		1
1% - 10			
11% - 20%		1	1
21% - 30%			
31% - 40%	1		1
41% - 50%			
51% - 60%			
61% - 70%			
71% - 80%	1		1
81% - 90%			
91% - 100%	1	1	2

---

PA11. Even though you have not submitted any jobs to [IOU], in the last year, have you completed any home energy assessments or audits with the intent of submitting them as part of the program?

PA11	PG&E (n=4)	SCE (n=4)	Total (n=8)

---

Yes	2	1	3
No	2	2	4
Don't Know		1	1

PA11A. If yes, how many home assessments have you done as part of the program so far?

PA11A	PG&E (n=2)	SCE (n=1)	Completed home assessments with the intent of submitting them (n=3)
1 – 10	1		1
11 – 20		1	1
21 – 30	1		1

PA12. On average, about how many customers do you contact before you are able to complete one energy assessment?

PA12	PG&E (n=4)	SCE (n=2)	Completed any assessments outside the program (n=6)
0	1		1
1-5		1	1
8-10	1		1
11 +	1		1
Don't Know	1		2
Other: "Most advertising is word of mouth." – SCE Contractor			

PA12A. Do you offer a free in-home walk-through, or do you have the homeowner commit some money to the cost of the assessment?

PA12A	PG&E (n=4)	SCE (n=2)	Completed any assessments

	outside the program (n=6)		
Yes	3	2	5
No			
Don't Know	1		1

PA13. In the last year, have you conducted any retrofit jobs you believe would have qualified for the EUC program but that you did not submit it?

PA13	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	2	4
No	2	2	4

PA13A. Why did you decide not to submit it to [IOU] for rebates?

PA13A	Utility
"Yes, but they have propane, not natural gas."	PG&E
"The customer didn't want the full package, just 1 or 2 measures."	PG&E
"The rebates were not worth the time and energy."	SCE
"Customers did not want to give over social security number."	SCE

PA14. Are you aware of Los Angeles County's participation in the Energy Upgrade program?

PA14	SCE (n=4)
Yes	4
No	0

PA14A. Were you aware of the following LA County EUC program components before this call?

(Showing # that said "yes" to program components)	SCE and aware of LA County's participation in the EUC program (n=4)

Additional incentives of \$1000-\$4000 on top of the utility incentives	4
Scholarships to reimburse you for training certifications	4
2% financing for homeowner energy upgrades	3
Regular program updates such as e-blasts and newsletters	4
TV, radio, and print ads drumming up homeowner demand	3

PA15. Have you heard of the “flex path”?

PA15	SCE (n=4)
Yes	4
No	0

PA15A. What do you know about it? How does it compare to the basic and advanced packages?

PA15A	Utility
"It is what certified assessors have been looking for. It emphasizes the things that make big impacts."	SCE
"It's a great program."	SCE
"Through the SCE website, don't know details."	SCE
"If the house scores more than 100 points, they can get up to \$1500 rebates. It complements the EUC program."	SCE

### Contractor Recruiting, Training, and Mentoring

R1. How many of your employees attended the EUC Participation Workshop?

R1	PG&E (n=4)	SCE (n=4)	Total (n=8)
1	3	2	5
2-5	1	2	3

R1A. After attending the Participation Workshop, did you feel that your organization was prepared to participate in the EUC program?

RA1A	PG&E (n=4)	SCE (n=4)	Employees attended EUC Workshop (n=8)
Yes	2	3	5
No	2		2
Don't Know		1	1

R1B. Why not?

R1B	Utility
"We went to workshops early in the program, and there have been many changes in the program."	PG&E
"It was a little too "Sell the program" rather than "explaining the program."	PG&E

R2. How many of your employees attended the 3-day Basic Path training offered by [IOU]?

R2.	PG&E (n=4)	SCE (n=4)	Total (n=8)
0			
1-3	3	4	7
Don't Know	1		1

R2A. After attending Basic Path training, did you or your staff feel prepared to perform the tasks required for the Basic Upgrade Package?

R2A.	PG&E (n=4)	SCE (n=4)	Attended 3-day Basic Path (n=7)
Yes	3	2	5
No		1	1
Not applicable		1	1

R2A1. Why not?

Not applicable to any respondent.

R3. What training did your BPI certified personnel complete to help them obtain the certification?

R3	Utility
"Through a friend who is a proctor."	PG&E
"HERO" Program."	PG&E
"Everblue."	PG&E
"CBPCA."	SCE
"CBPCA."	SCE
"Cal Performance contractors."	SCE

R3A. Who sponsored this training?

R3A	Utility
"No one."	PG&E
"HERO" Program."	PG&E
"Yes, by LA County."	PG&E
"CBPCA."	SCE
"Cal Performance contractors."	SCE

R3B. How many days of training did this involve?

R3B	PG&E (n=4)	SCE (n=4)	Total (n=8)
1 week or less	2	1	3
1 to 2 weeks		2	2
2 to 3 weeks	1	1	2
3 to 4 weeks	1		1

R3C. Did you receive a scholarship or a loan to finance the training?

R3C	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	4	6
No	2	0	2

R3C-1. What?

R3C-1	PG&E (n=2)	SCE (n=4)	Received a scholarship or a loan (n=6)

CSG Grant Program	1	1	2
Scholarship		2	2
No Answer	1	1	2

R4. Have any of your staff who are not BPI certified received training that would help prepare them to implement EUC measures and procedures? (Such as: attic insulation, duct sealing, air sealing, etc.)

R4	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	1	4
No		1	1
No employees have BPI training		1	1
Not applicable	1	1	2

R4A. What training did they receive?

R4A	PG&E (n=3)	SCE (n=1)	Received training (n=4)
Weatherization, blower door certification	1		1
In house	2		2
HVAC		1	1

R5. What types of employees are responsible for the EnergyPro software modeling required for the program?

R5	Utility
"I work with a dedicated vendor, Evergreen Technologies, to do the modeling."	PG&E
"Owner."	PG&E
"Owner."	PG&E
"Sales people."	PG&E
"EUC Program Lead."	SCE
"The owner, who is BPI certified."	SCE
"Subcontractors"	SCE
"All Employees"	SCE

R6. Did anyone in your company use EnergyPro or any other home energy modeling software before participating in the program?

R6	PG&E (n=4)	SCE (n=4)	Total (n=8)

Yes	1	3	4
No	3	1	4

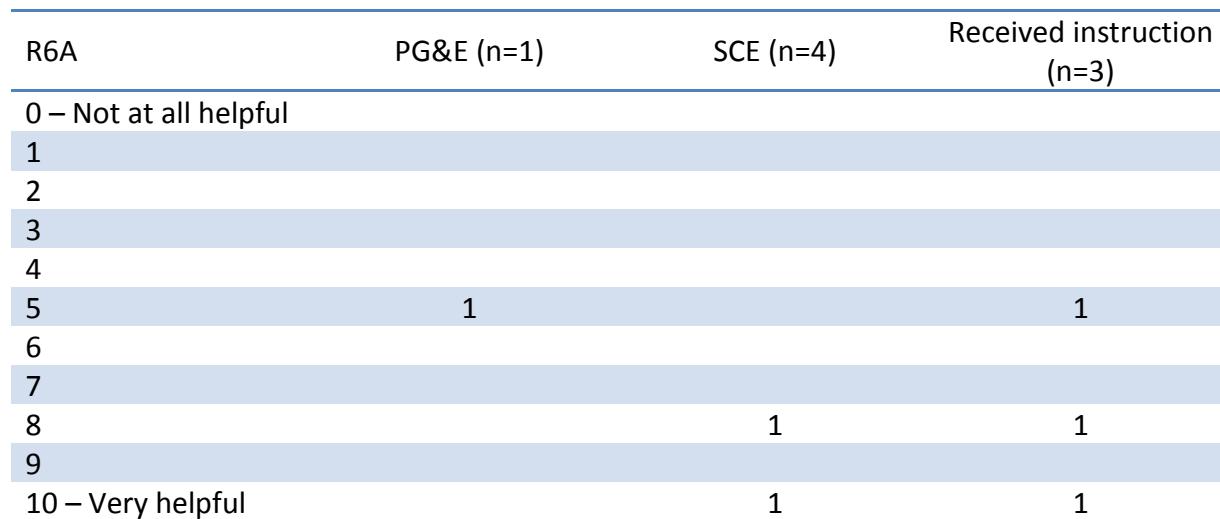
R6A. If another software, which one?

R6A	Utility
"TightSoft for HVAC."	PG&E
"Don't know but was through SCA."	SCE
"RightSoft and Elite - both are for HVAC calculations."	SCE
"CommonSense - a web-based program that shows the efficiency of an HVAC system and creates reports for customers."	SCE

R6. Have you received instruction on how to use the EnergyPro software program?

R6	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	2	3
No	3	2	5

R6A. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the EnergyPro instruction you received?



R6B. If no, why not?

R6B	Utility
-----	---------

"Time and Cost - Don't have the software yet."

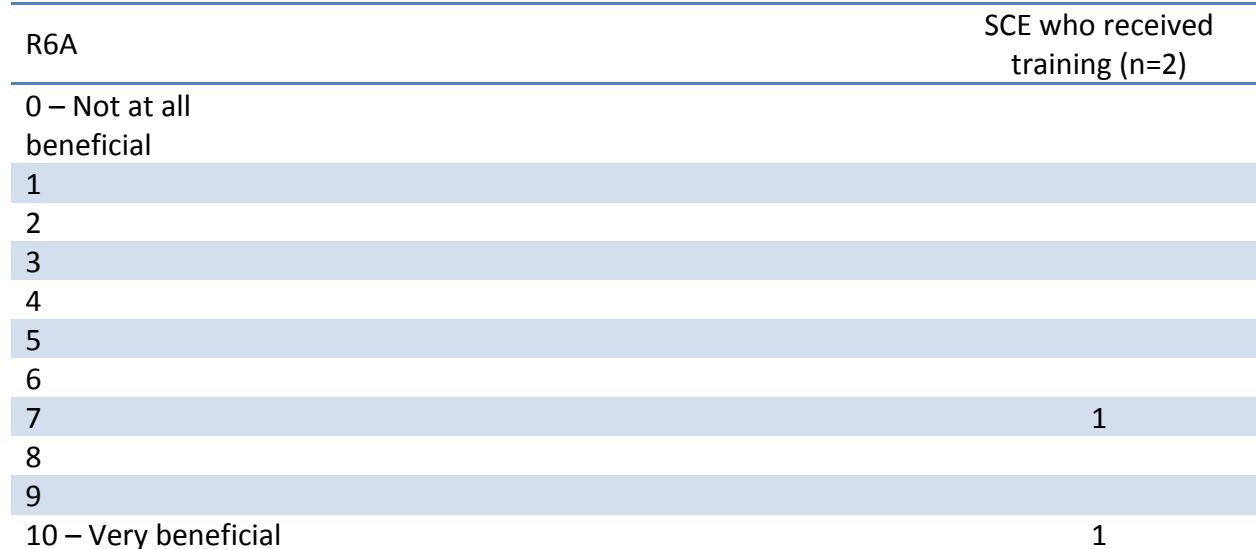
PG&E

R7. Did you receive training on how to size HVAC equipment based on the expected energy use and size of the home?

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R7	SCE (n=4)
Yes	2
No	2

R7A. On a scale of 0-10 with 0 being not at all and 10 being very much, how much did you benefit from this training?



R8. Are you currently participating in SCE's Energy Star Residential HVAC Quality Installation Program (QI)?

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R8	SCE (n=4)
Yes	2
No	1
Not Applicable	1

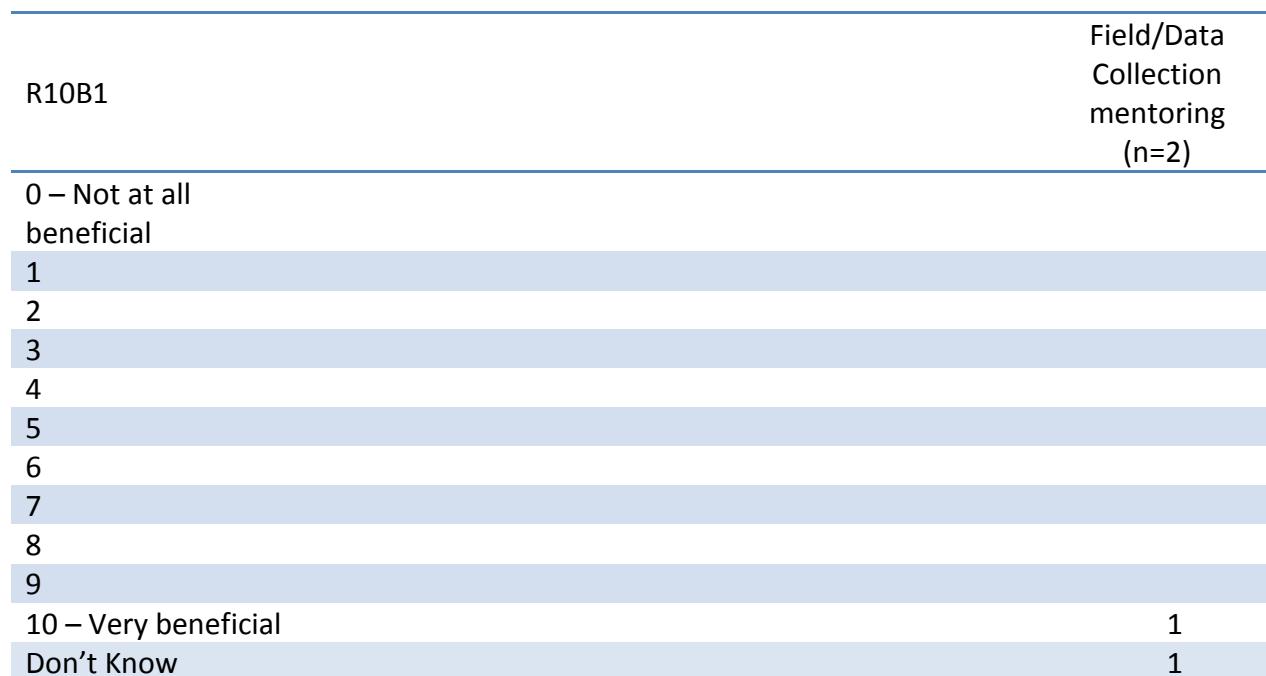
R10. Have you received any mentoring related to the EUC program?

R8	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	1	2
No	3	3	6

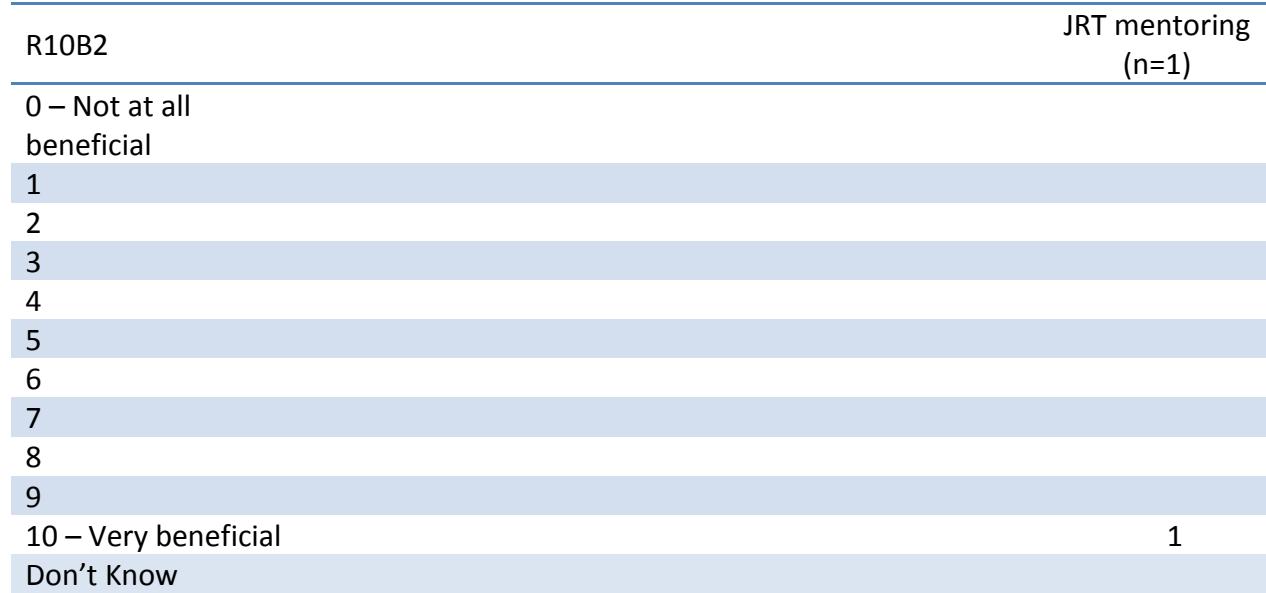
R10A. If yes, which type(s) did you receive?

(Showing # that said “yes” to type of mentoring)	PG&E (n=1)	SCE (n=1)	Received mentoring (n=2)
Field/Data Collection	1	1	2
JRT (Job Reporting Template)/ Job Processing	0	1	1
EnergyPro software	0	1	1
Mentoring received during online Quality Control inspection	0	0	0

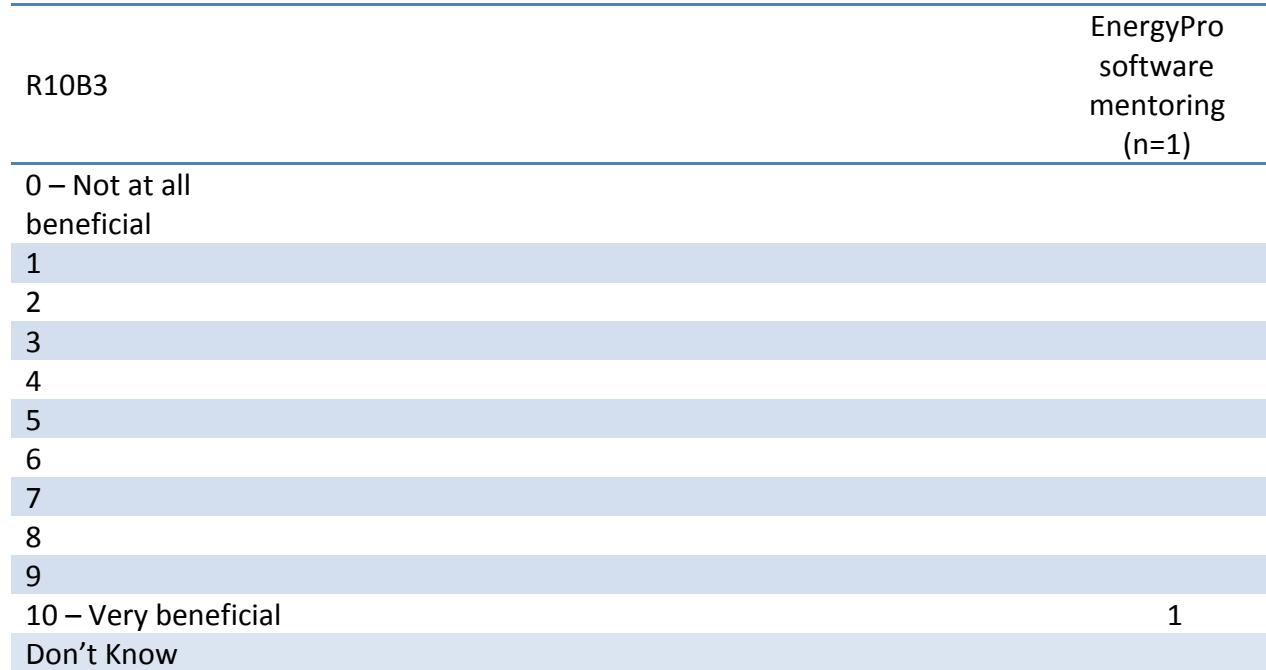
R10B1. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the field and data collection mentoring?



R10B2. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the JRT mentoring?



R10B3. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the EnergyPro Software mentoring?



R10B4. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the mentoring received during the online Quality Control inspection?

Not applicable to any respondent.

R11. What other types of EUC-related training would benefit you or your staff?

R11.	Utility
"Combustion safety testing and blower door testing."	PG&E
"Energy Pro, Processing the Paperwork."	PG&E
"Mentoring for the EUC, Energy modeling, and creating sales presentations."	PG&E
"Ceilings, Duct insulation, HVAC sizing."	SCE
"Windows Installation and plumbing (for water heaters)"	SCE

R12. Do you or your company have an interest in getting additional training on how to best market your company and its services?

R12	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	3	6
No	1	1	2

R12A. If no, why not?

R12A.	Utility
"Without more rebates, marketing won't be worth it."	SCE

### EnergyPro

E1. Do you think EnergyPro covers the major opportunities for energy efficiency?

E1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	2	4
No	1	1	2
Don't Know		1	1
Other: "You can make Energy Pro say anything you want, but if you use it correctly it is mostly accurate" – PG&E contractor			

E1A. If no, why not?

E1A	Utility
-----	---------

"We have to tweak it to get results, especially for more advanced measures that don't fit in the model."	PG&E
"The requirements for LA county rebates are not compatible with EnergyPro. EnergyPro can include almost everything, but it is hard to translate what it says into what LA county needs for its program requirements. Flex Path helps with this as it covers some of that. Sealing is not part of the LA county program, but that can account for up to 70%, but windows are included in the LA program, and that is a smaller part."	SCE

E2. Do you think EnergyPro is accurate in its estimates?

E2	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	2	3
No	3	1	4
Don't Know		1	1

E2A. Why not?

E2A.	Utility
"Attic insulation seems incorrect and under represented."	PG&E
"We have to tweak it to get results, especially for more advanced measures that don't fit in the model."	PG&E
"Garbage in, garbage out. 10 people might get 10 different results."	PG&E
"Poor duct design tools"	SCE

E3. What do you think are the main pros and cons to using EnergyPro?

E3.	Utility
"It is what we have, and better than nothing."	PG&E
"Attic insulation seems incorrect and under represented."	PG&E
"We have to tweak it to get results, especially for more advanced measures that don't fit in the model.."	PG&E
"Garbage in, garbage out. 10 people might get 10 different results."	SCE
"It takes a lot of guesswork out, saves time from doing it manually. It does take a long time to learn."	SCE
"Poor duct design tools"	SCE

E4. Does your company use any other software programs to model estimated energy usage outside of the EUC program?

E4.	Utility
“Wrightsoft. I have heard of Recurve.”	PG&E
“Wrightsoft.”	PG&E
“Lots of contractors are using other software to doublecheck Energy Pro (i.e. Recurve).”	PG&E
“DesignStar puts it all into a sales brochure.”	PG&E
“SCE related Energy Management Program. Not sure of the name.”	SCE
“Yes.”	SCE
“No.”	SCE
“Common Sense. WrightSoft.”	SCE

### **Customer Sales/Marketing**

CS1. Has your company been actively promoting the program to new or existing customers?

CS1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	2	6
No	0	2	2

CS1A. If no, Why not?

CS1A.	Utility
“Not trained yet. The company is still shifting its priorities from other types of non-EUC related work.”	SCE
“Rebate covers only audits, in this climate it doesn’t add up to much savings.”	SCE

CS1B. If yes, please describe who you have been promoting the program to.

CS1B.	Utility
“Anyone who might qualify.”	PG&E

"Every time I work with general contractors or deal with customers I talk about energy efficiency programs."	PG&E
"Telemarketing, Google Ad words, brochures, home shows, radio commercials."	PG&E
"It is useful as an educational tool for the WH approach."	SCE
"Brochures, website, and word of mouth."	SCE

CS2. What marketing has your company done to get customers interested in a EUC retrofit?

---

CS2.	Utility
"Talking with customers."	PG&E
"Nothing yet."	PG&E
"San Mateo County EUC workshops, through Ecology Action."	PG&E
"Telemarketing, Google Adwords, brochures, home shows, radio commercials."	PG&E
"Just starting. Printing literature. The Co-Op Marketing program through LA County. Also looking at events to set up booths.."	SCE
"None"	SCE
"Brochures from the EUC LA county program"	SCE

CS2A. What marketing materials do you use?

CS2B. Where did you get the marketing materials?

CS2C. What types of marketing materials did you find most effective?

CS2D. Have you utilized any LA County or QI Program co-op marketing funds?

CS3. What sales tools do you use to present information to prospective customers?

---

CS3.	Utility
"Talking to them. EUC website."	PG&E
"San Mateo County EUC workshops, through Ecology Action."	PG&E
"Walk through the audit with the customer, explaining each test and what is found."	PG&E
"Literature."	SCE
"EUC website, EUC flyers, Walkthrough in home."	SCE
"Brochures, Website, CommonSense, energyPro."	SCE

CS4. What types of messages seem to motivate customers to get the work done? Is there a combination of messages that is especially effective?

---

CS4.	Utility
"Saving Energy. Customers don't understand what "comfort level" means. They understand afterwards, but not before. They don't want to pay for it."	PG&E
"Rebates. However, we customize the messages for each customer."	PG&E
"Comfort, then Health. It is better than getting new windows, and so people who come in for a specific item ("I need a new AC") realize that the WH approach is better. We can also use the Advance package to sell the inspections, since they could qualify for the Adv. package with an audit."	PG&E
"50%."	SCE
"Health and Safety first, then Savign Energy, and then Saving Money."	SCE
"Health is number one and drives people to actually get work. The best approach is to educate them on the WH approach and why it matters. Explain the audit as you do it. Feel out the customer, because it really depends."	SCE
"Depends on the customer. If you see a Prius, go green, etc."	SCE

CS5. Have you used other programs in combination with EUC to help sell the job?

---

CS5	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	2	4
No		1	1
Don't Know	1		1
Not Applicable		1	1
Other: "Local ABAG programs, but those are gone now." – PG&E Contractor			

CS5A. What other programs?

---

CS5A	Utility
"ARRA low-income program through San Wuakeen County."	PG&E
"Rebates. However, we customize the messages for each customer."	PG&E
"Manufacturers rebates. Federal tax credits."	PG&E
"CSI (California Solar Initiative)."	SCE
"LA county program, the QI program."	SCE

CS5. What do you think are the best ways to engage customers about participating in the program?

---

CS5.	Utility
“I tell them not to pay me until one month later, after they have felt the difference. They always pay gladly.”	PG&E
“EUC website.”	PG&E
“Ecology Action workshops have been very effective.”	PG&E
“Walk through the audit with the customer, explaining each test and what is found.”	PG&E
“Health and Saftey.”	SCE
“Health is number one and drives people to actually get work. The best approach is to educate them on the WH approach and why it matters. Explain the audit as you do it. Feel out the customer, because it really depends.”	SCE
“Let the customer participate in the audit.”	SCE

CS6. Have any customers come to you inquiring about the program?

---

CS6	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	2	6
No		1	1
Not Applicable		1	1

CS6A. Where do your customers typically hear about the program?

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CS6A	Utility
“The EUC Website.”	PG&E
“The EUC Website.”	PG&E
“The EUC Website.”	PG&E
“The EUC Website. SMUD's website.”	PG&E
“One referral from SCE, and someone saw a feature about it on the local news.”	SCE
“EUC website, or related web searches”	SCE

CS7. In your opinion, what types of advertising or marketing are the most effective in generating customer interest in EUC?

---

CS7	Utility
-----	---------

"Web advertisements. The EUC website."	PG&E
"Mention energy costs."	PG&E
"Ecology Action workshops have been very effective.."	PG&E
"Bill inserts."	SCE

### Customer Participation Barriers

CB1. What do you think keeps customers from participating in the program in general?

---

CB1	Utility
"Customers don't understand comfort unity afterwards, so they don't see why to spend so much money. The rate-of-return and be very slow."	PG&E
"Money."	PG&E
"Customers can't see what they are paying for. An HVAC contractor can tell them that they will fix their problems by selling them a big box, and they get a box. We do better, but it isn't attached to an object. Also, in these type of jobs, sometimes repairs need to be made before the jobs can be finished, so that ups the cost."	PG&E
"The investment required to take advantage of the rebate."	PG&E
"Because it is a state program, people are worried about red tape and don't have faith in the program."	SCE
"Social security numbers are sensitive; some people don't want to give them out. Also, people don't have a lot of money."	SCE

CB2. What do you think are the top three reasons customers decide not to move forward from the energy assessment to a retrofit?

---

CB2	Utility
"They don't understand comfort, because they have nothing to compare it to. They feel like their current house is just "normal". They also don't really understand what they are getting for their money...they would rather spend more money on a bigger HVAC machine rather than spend half that to fix their ducts. When they buy a machine, they actually get something tangible."	PG&E
"Money."	PG&E
"Customers can't see what they are paying for. An HVAC contractor can tell them that they will fix their problems by selling them a big box, and they get a box. We do better, but it isn't attached to an object. Also, in these type of jobs, sometimes repairs need to be made before the jobs can be finished, so that ups the cost."	PG&E
"The sizable upfront investment, and lack of financing."	PG&E

"Cost or lack of financing.."	SCE
"Social security numbers are sensitive; some people don't want to give them out. Also, people don't have a lot of money."	SCE

CB3. Do you have any ideas as to how the program can get these customers to move forward?

---

CB3.	Utility
"Give them time to pay, so they can feel the difference. Link ductwork and weatherization to a new appliance, so they feel like they are getting something tangible."	PG&E
"Money."	PG&E
"Easy and clear financing. It must be easy and quick to use for both contractors and participants."	PG&E
"No. customers who can't get financing are risky customers."	SCE

CB4. About what percentage of assessments don't go forward due to lack of financing. About how many jobs does this represent?

---

CB4	Utility
"20%."	PG&E
"A lot of jobs. The CHF program was very successful, but is gone now."	PG&E
"50%."	PG&E
"50%, 10."	SCE
"80%"	SCE

CB5. We understand that these projects are typically expensive for a customer. How do you think program-based financing could best be structured to make customers more likely to proceed with the job after an assessment?

---

CB5	Utility
"Like CHF. It would be ideal if they could pay through savings."	PG&E
"Similar to SMUD. You should be able to call it in and get an answer in minutes, like GE or Wells Fargo."	PG&E
"PACE, Power savers"	SCE
"Should go through either the contractor or the customer. It should be 4% or 5% for 5 years."	SCE

CB5A. Who would receive the financing? Contractor or customer?

---

CB5A	Utility
"Go through the customer, not the contractor. It makes it harder to do more of these jobs when I have to wait to get paid."	PG&E
"Should go through the contractor."	PG&E
"It should be handled by the customers, because the contractors are already overwhelmed and it would push out small contractors."	PG&E
"Contractor."	PG&E
"Contractor."	SCE

CB5B. What would be the terms?

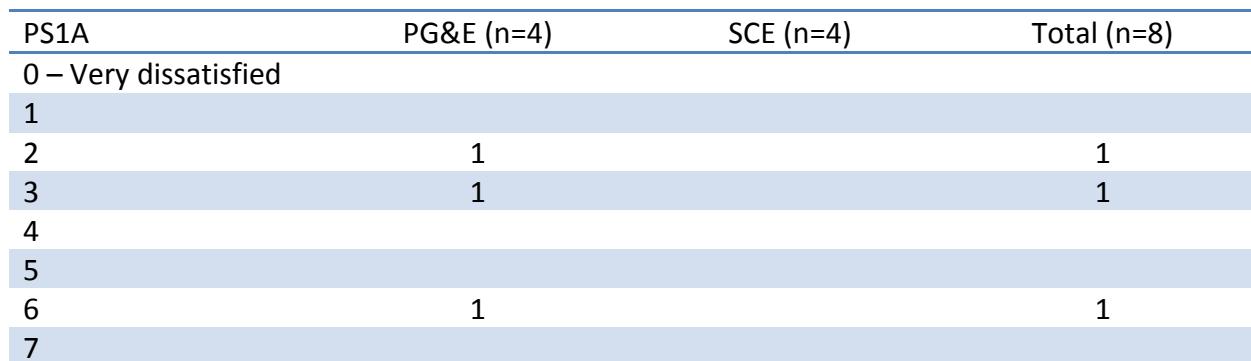
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CB5B	Utility
"It would have to be generous terms."	PG&E
"It would be ideal if they could pay through savings."	PG&E
"Ten years, below 8%."	PG&E

### Program Satisfaction

I'm going to ask you a series of questions that are intended to determine your satisfaction with the EUC program.

PS1A. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with the communications with the utilities about program requirements?



8	2	2
9	1	1
10 – Very satisfied	1	1
Don't Know	1	1

PS2A. Why do you give that rating?

---

PS2A	Utility
Hard to communicate due to too many points of contact.	PG&E

PS1B. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with the communications with local government about program requirements?

PS1B	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Very dissatisfied			
1			
2			
3	1		1
4	1		1
5			
6	1	1	2
7			
8		1	1
9		1	1
10 – Very satisfied	1	1	2
Don't Know			

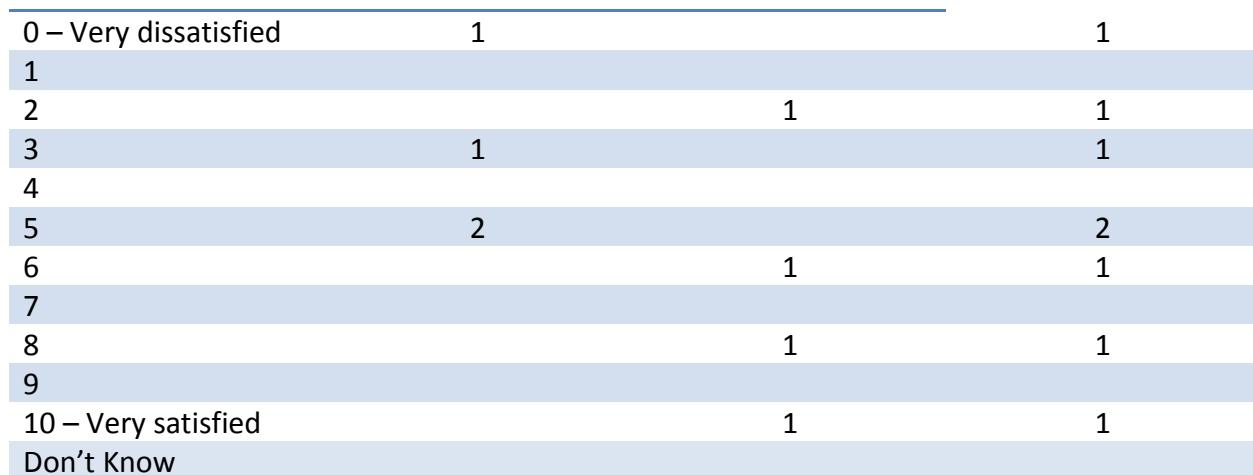
PS2B. Why do you give that rating?

---

PS2B	Utility
“They don't do much.”	PG&E

PS1C. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with the paperwork requirements for the program?

PS1C	PG&E (n=4)	SCE (n=4)	Total (n=8)

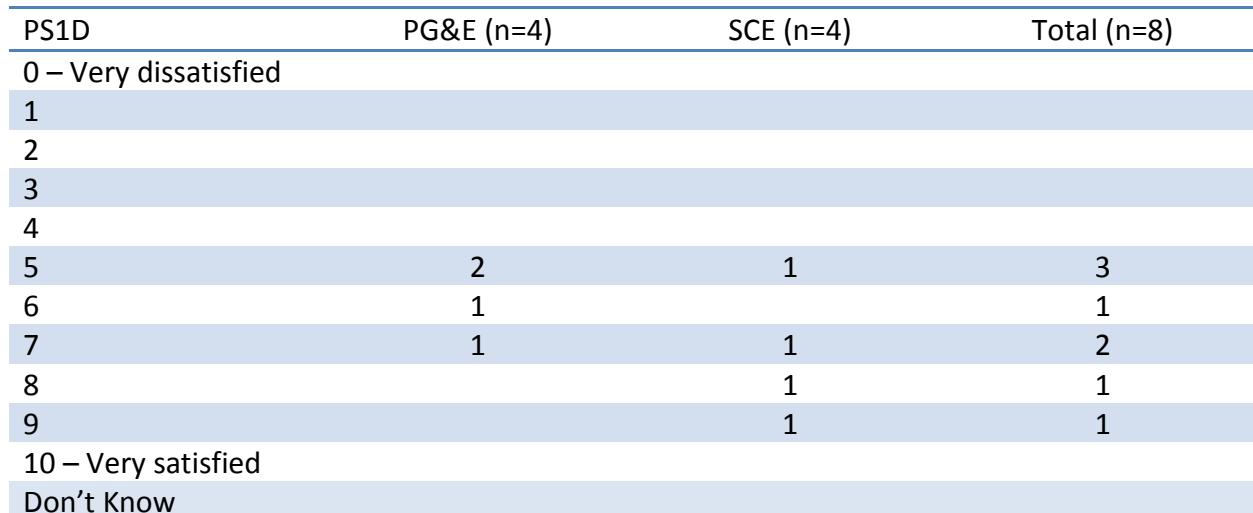


PS2C. Why do you give that rating?

---

PS2C	Utility
"It takes a lot of time. The time taken really takes away from profits."	PG&E
"Too much, too repetitive, too many delays"	PG&E
"The sheer volume and delays."	SCE

PS1D. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with the Energy Pro modeling software?



PS2D. Why do you give that rating?

Not applicable to any respondent.

PS1E. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with the marketing support from the local government whose jurisdiction you most often work?

PS1E	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Very dissatisfied			
1			
2			
3			
4		1	1
5			
6	1		1
7	1		1
8	1		1
9		2	2
10 – Very satisfied	1	1	2
Don't Know			

PS2E. Why do you give that rating?

PS2E	Utility
“Haven't seen much”	SCE
“Inland Empire would be a "1", I've seen nothing. LA County is a "9".”	SCE

PS1F. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with the marketing support from the utility?

PS1F	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Very dissatisfied			
1			
2			
3			
4			
5			
6	1		1
7			
8	2	3	5
9		1	1
10 – Very satisfied			

Don't Know	1	1
------------	---	---

PS2F. Why do you give that rating?

Not applicable to any respondent.

PS1G. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with the training offered by the program?

PS1G	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Very dissatisfied			
1			
2			
3			
4			
5	1		1
6			
7	1		1
8	1	2	3
9			
10 – Very satisfied	1	2	3
Don't Know			

PS2G. Why do you give that rating?

Not applicable to any respondent.

PS1H. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with the program incentives?

PS1H	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Very dissatisfied			
1			
2		1	1
3			
4	1		1
5			
6			
7	1		1
8	2		2
9			

10 – Very satisfied	3	3
Don't Know		

PS2H. Why do you give that rating?

---

PS2H	Utility
"Incentives are not high enough. Even people who are uncomfortable in their home can't pay the upfront cost."	PG&E
"Not good enough for this climate."	SCE

PS1I. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with the additional local government incentives?

PS1I	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Very dissatisfied		1	1
1			
2			
3			
4	1		1
5	1		1
6			
7		2	2
8			
9			
10 – Very satisfied	1	1	2
Don't Know	1		1

PS2I. Why do you give that rating?

---

PS2I	Utility
"Incentives are not high enough. Even people who are uncomfortable in their home can't pay the upfront cost."	PG&E
"Haven't seen any."	SCE

PS1J. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with the program measure installation requirements?

PS1J	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Very dissatisfied			
1			
2			
3			
4			
5	1	1	2
6	2		2
7		1	1
8		1	1
9			
10 – Very satisfied		1	2
Don't Know			

PS2J. Why do you give that rating?

Not applicable to any respondent.

PS1K. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with the program overall?

PS1K	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Very dissatisfied			
1			
2			
3			
4			
5		1	1
6			
7	3		3
8			
9		2	2
10 – Very satisfied		1	2
Don't Know			

PS2. Why do you give that rating?

Not applicable to any respondent.

PS3. What would you say are the positive features of the program overall?

PS3	Utility
“It helps us establish new business. It increases customer awareness.”	PG&E
“incentivizes customers”	PG&E
“Good job with marketing”	PG&E
“Raises awareness of BPI in the industry.”	SCE
“Safety and Combustion testing is the best part. Also Test-in, Test-out.”	SCE
“Rebates”	SCE
“The LA County Champion program. The energy savings are dramatic.”	SCE

PS4. What would you say are the biggest problems of the program overall?

PS4	Utility
“Propane doesn’t qualify. Propane is much more expensive, so I’ve got people doing it without the program just for energy savings.”	PG&E
“Not enough money, and it is complex.”	PG&E
“Paperwork and lack of financing.”	PG&E
“Process. One person to help with the process. Keep it consistent and cut down on the back-and-forth that wastes so much time.”	PG&E
“Paperwork, prohibitively expensive assessment equipment.”	SCE
“The paperwork and getting people trained up to participate.”	SCE
“Not enough rebates”	SCE
“Back and forth paperwork makes it take longer. It is getting better.”	SCE

PS5. How do you feel about local government’s involvement in the program overall?

PS5	Utility
“Excellent”	PG&E
“Process. One person to help with the process. Keep it consistent and cut down on the back-and-forth that wastes so much time.”	PG&E
“LA County has been great.”	SCE
“It’s great. LA County has been doing a good job.”	SCE

PS5. Do you have any suggestions for how [IOU] could solve these problems?

PS5	Utility
"Propane doesn't qualify. Propane is much more expensive, so I've got people doing it without the program just for energy savings."	PG&E
"Promote the program with bill inserts. The Chinese community learned about this program late. Put adds in Chinese local television."	PG&E
"Easier paperwork, more financing."	PG&E
"Process. One person to help with the process. Keep it consistent and cut down on the back-and-forth that wastes so much time."	PG&E
"Not enough experience."	SCE

### Program Design

PD1. What do you see as the strengths of the basic upgrade package of the program?

PD1	Utility
"To offer the customer something to feel that they save money. Some can't afford the advanced package."	PG&E
"It seems useful to have both, but I haven't done any jobs yet."	SCE
"Combustion safety testing. Air and Duct sealing."	SCE
"Simpler. Fewer steps to participate."	SCE

PD2. What do you see as the weaknesses of the basic upgrade package?

PD2	Utility
"Does not cover many types of homes. Many do not have central heaters or duct work."	PG&E
"It is only a partial job. If a contractor isn't eligible to do the advanced package, you really have to team up with another company to do the combustion testing, which lowers your profit more and is more hassle. It is also a lower rebate."	PG&E
"Rebate amount"	SCE

PD3. Could the basic upgrade package be improved in any way?

PD3	Utility
-----	---------

"It is only a partial job. If a contractor isn't eligible to do the advanced package, you really have to team up with another company to do the combustion testing, which lowers your profit more than it's more hassle. It is also a lower rebate."	PG&E
"The flex path fills in some gaps."	SCE
"Incentives"	SCE
"Rebate"	SCE

---

PD4. What do you see as the strengths of the advanced upgrade package of the program?

PD4	Utility
"More flexible, many more homes are eligible."	PG&E
"Rebates."	SCE
"Higher rebate."	SCE

PD5. What do you see as the weaknesses of the advanced upgrade package?

PD5	Utility
"Should be able to do windows without a special license. A C-20 license should be allowed to use 2 contractors instead of just one."	SCE

PD6. Could the advanced upgrade package be improved in any way?

PA12A	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	0	1	1
No	0	0	0
Don't Know	4	3	7

PD6A. If yes, how?

PD6	Utility
"Should be able to do windows without a special license. A C-20 license should be allowed to use 2 contractors instead of just one."	SCE

PD6B. If no, why not?

Not applicable to any respondent.

PD7. Would you prefer to use software other than EnergyPro for modeling?

PA12A	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	1	3
No	0	3	3
Don't Know	1	0	1
Other: "No other option that I know of." – PG&E Contractor			

PD7A. If yes, what?

PD7A	Utility
"Recurve"	PG&E
"DesignStar puts it all into a sales brochure"	PG&E
"The Quality Initiative program uses RightSoft or Elite for HVAC. When I use them as a subcontractor for someone with Energy Pro, my calculations don't match theirs."	SCE

PD8. In the future, would you be willing to float the rebate, i.e. discount the job to the customer and then have the rebate come to you?

PD8	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	3	5
No	2	1	3

PD8A. If no, why not?

PD8A	Utility
"I'm in a better position to deal with the paperwork."	PG&E
"Can't afford it. Small companies don't have enough up front capital to invest in that."	
People call me because I'm local and they don't trust the bigger companies. You can't have small and local and also be able to float rebates."	PG&E
"If the customer can afford the job, they can afford to wait."	PG&E

“That's bad business.”

SCE

---

PD8B. If yes, what terms would make this arrangement acceptable to you?

---

PD8B

Utility

“I do that with solar rebates and charge the customer interest for the time it takes to get the rebate.”

SCE

“It needs to be consistent, so I can plan around it.”

SCE

---

PD8C. If yes, please describe the impact, if any, this might have on the number of jobs you could complete.

---

PD8C

Utility

“Positive impact.”

PG&E

“More jobs”

PG&E

“Yes, it will increase the number of jobs.”

SCE

“No much of an impact.”

SCE

“I'd get more jobs.”

SCE

---

### Inter Contractor Conversation

ICC1. Have you talked to other EUC contractors outside of your company about the EUC program?

---

ICC1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	4	7
No	1	0	1

---

ICC1A. If yes, what is the nature of those conversations?

---

ICC1A

Utility

“A larger contractor is getting a lot of work out of it, but I know a one-man contractor who is having trouble with it because of tall the time that the paperwork requires.”

PG&E

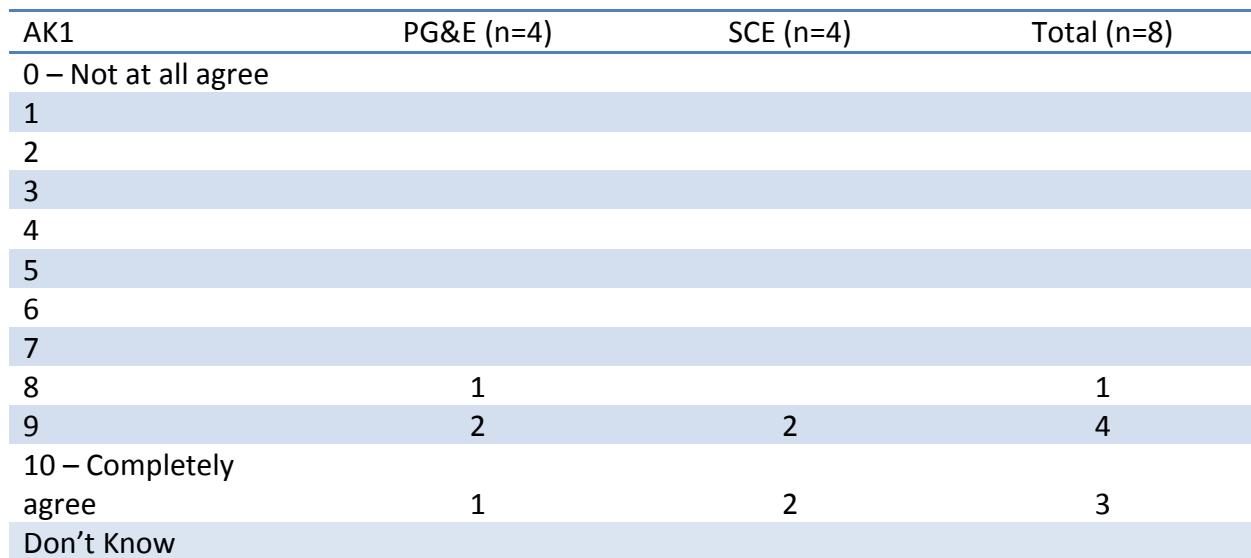
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"The same things I have been saying."	PG&E
"Red tape"	PG&E
"It doesn't address all of the important measures, so that when you do a good job with many uncovered measures, you don't get an increased rebate for the increased energy savings that come from the non-covered measures."	SCE
"Yes. I've heard mixed things. Having a 3rd party verify the jobs increases the time. Rebate delays are also an issue."	SCE
"Most feel that the process is too time consuming."	SCE
"The back and forth of the paperwork takes a lot of time. They do get more jobs from it and otherwise think it is great."	SCE

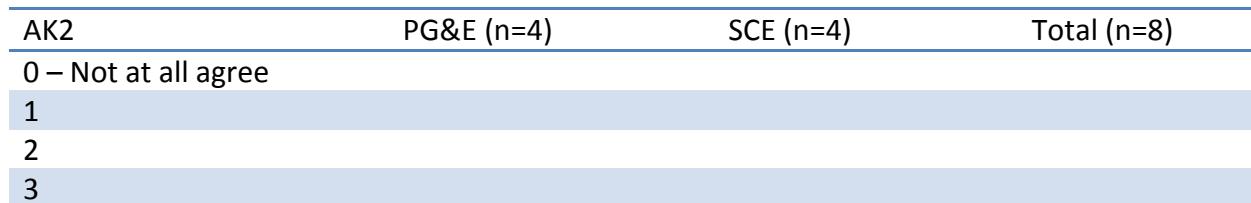
**AKA-B**

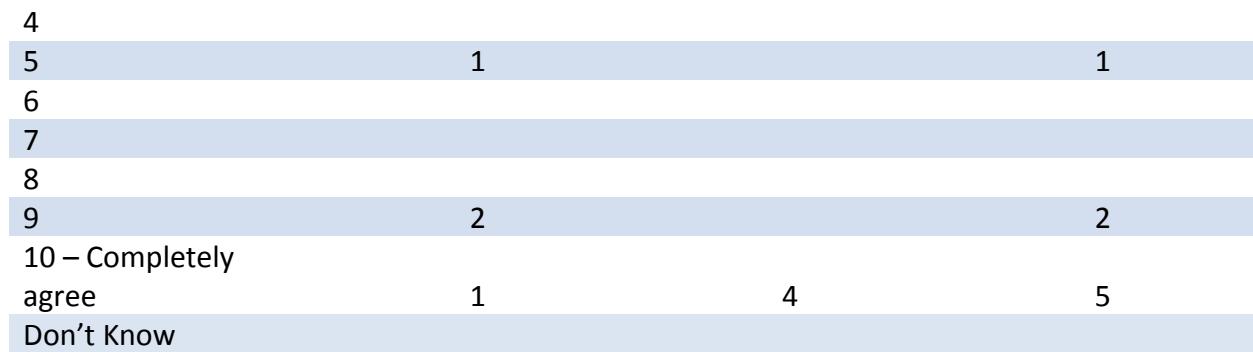
I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means completely agree, please tell me how much you agree with each statement.

AK1. The comfort of a home that has sealing around windows and doors, insulated walls and attics, insulated hot water systems, and all high-efficiency appliances would be significantly greater than that for a home without these features.

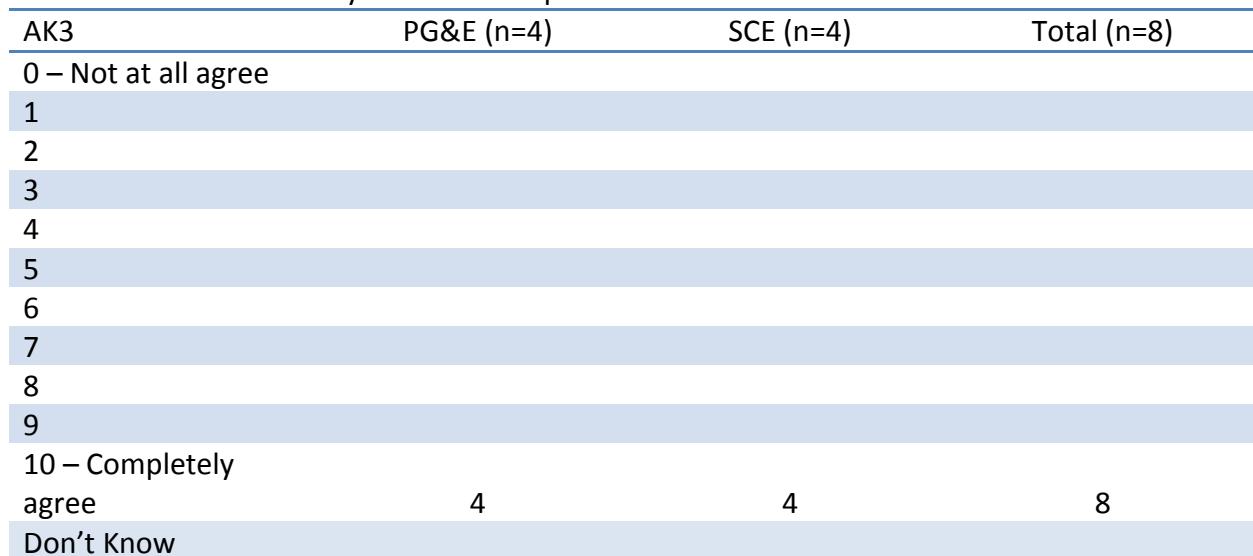


AK2. The energy costs of a home that has these features would be significantly less than one that does not.

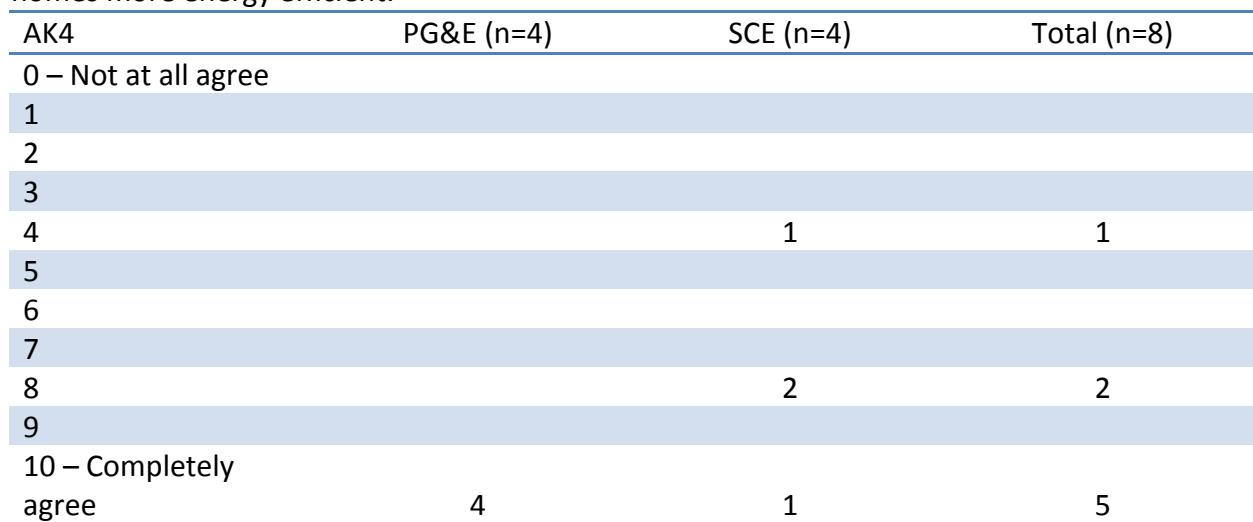




AK3. Household electricity use has an impact on the environment.



AK4. I am concerned that global climate change will increase if homeowners do not make their homes more energy efficient.



Don't Know

AK5. It is my responsibility to highlight the potential financial savings that can result from energy assessments and retrofits to my customers.

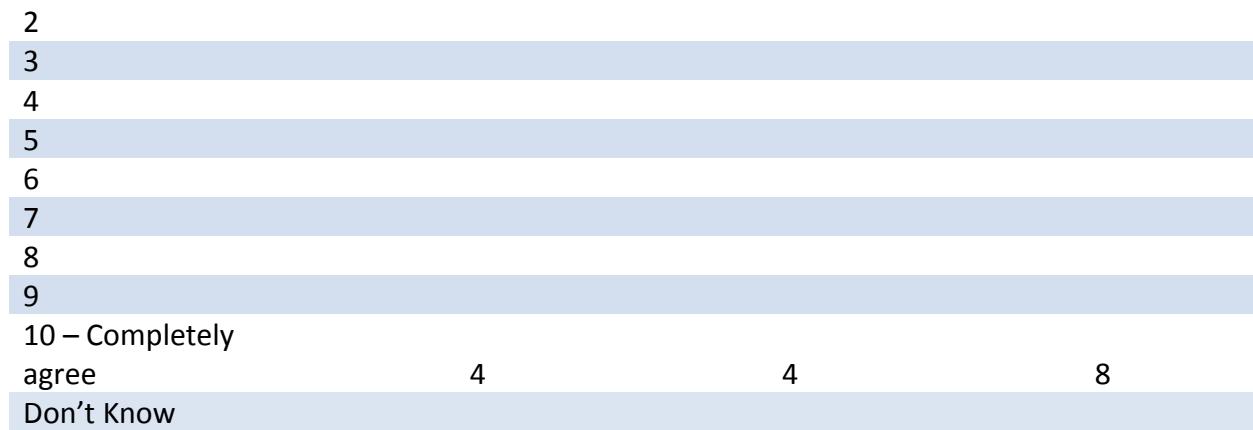
AK5	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2			
3			
4			
5			
6			
7			
8	1		1
9			
10 – Completely agree	3	4	7
Don't Know			

AK6. It is not my responsibility to help the environment by encouraging my customers to save energy.

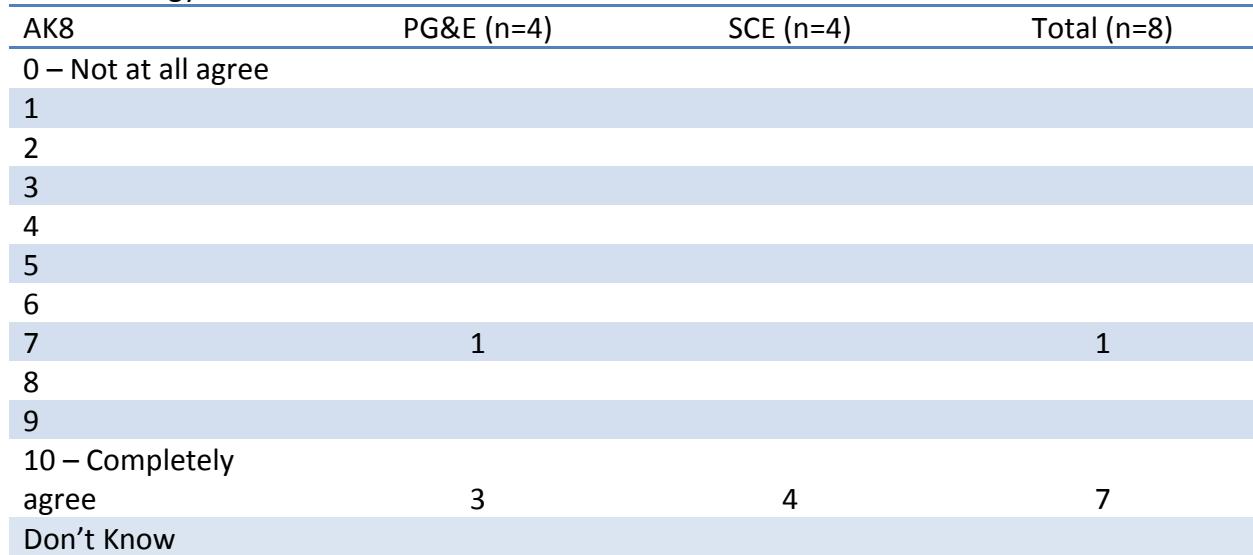
AK6	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree	1	3	4
1	1		1
2	1	1	2
3			
4			
5	1		1
6			
7			
8			
9			
10 – Completely agree			
Don't Know			

AK7. I intend to promote energy efficiency to my customers.

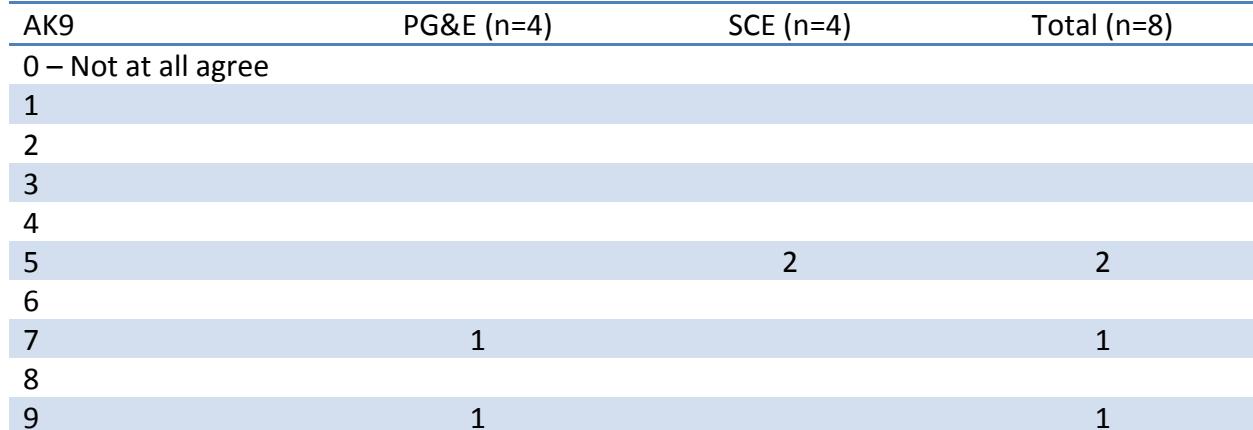
AK7	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			

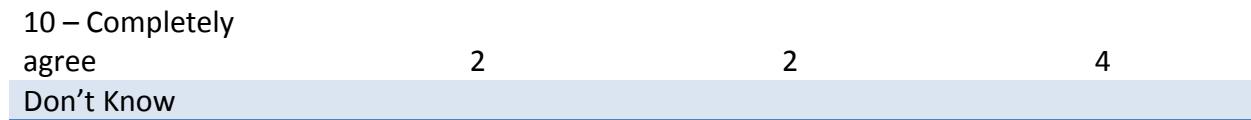


AK8. I very often encourage my customers to do a comprehensive retrofit of their homes to reduce energy use and increase comfort.

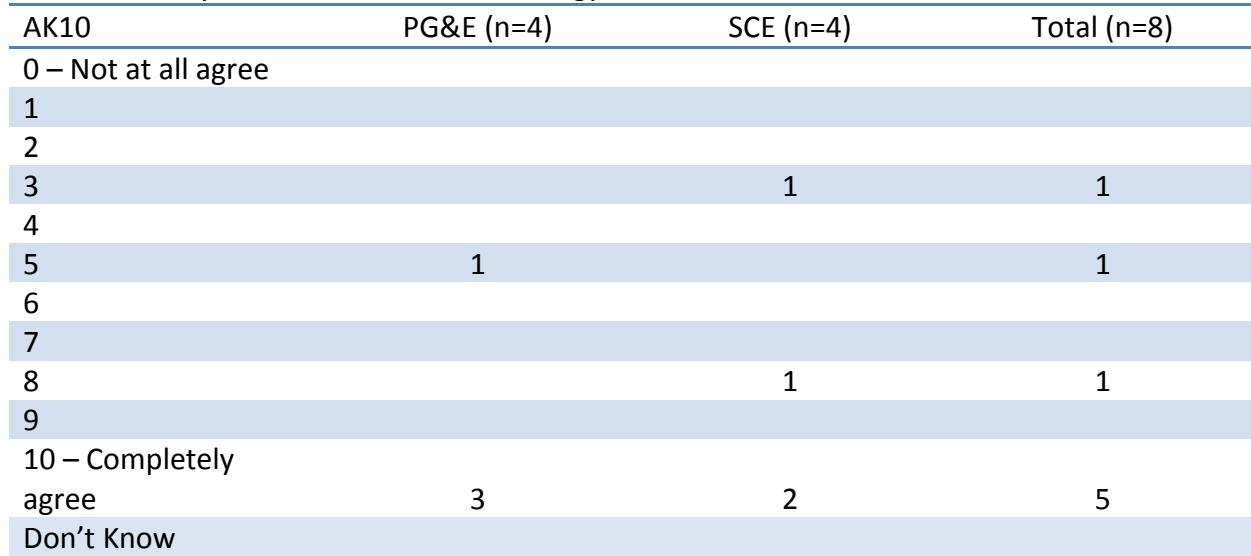


AK9. I often worry that the cost of energy for my own home will increase.

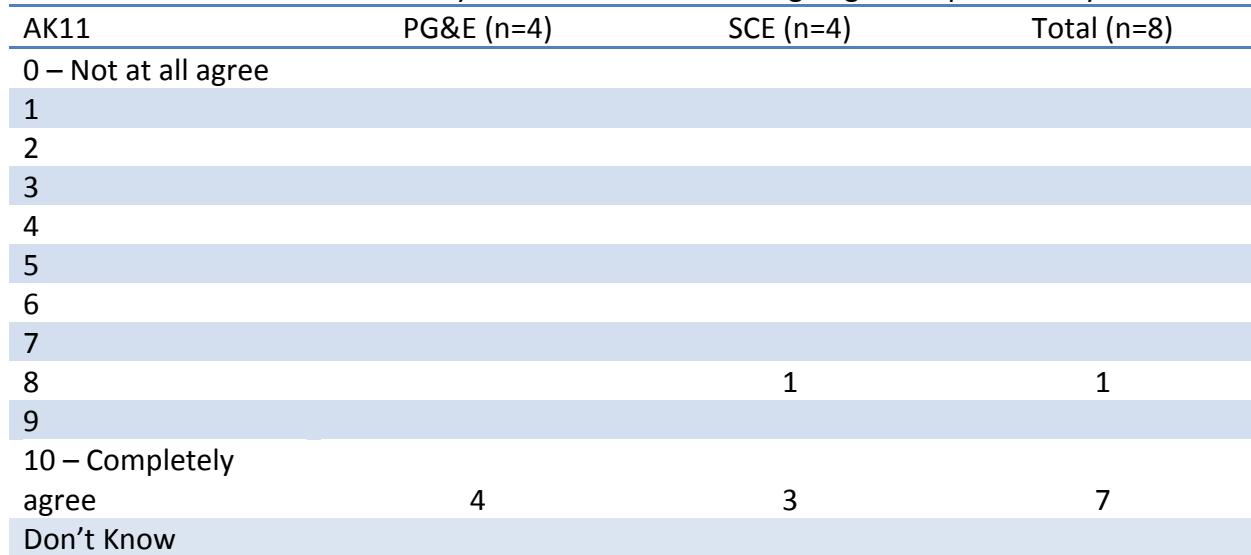




AK10. I am very concerned about how energy use affects the environment.

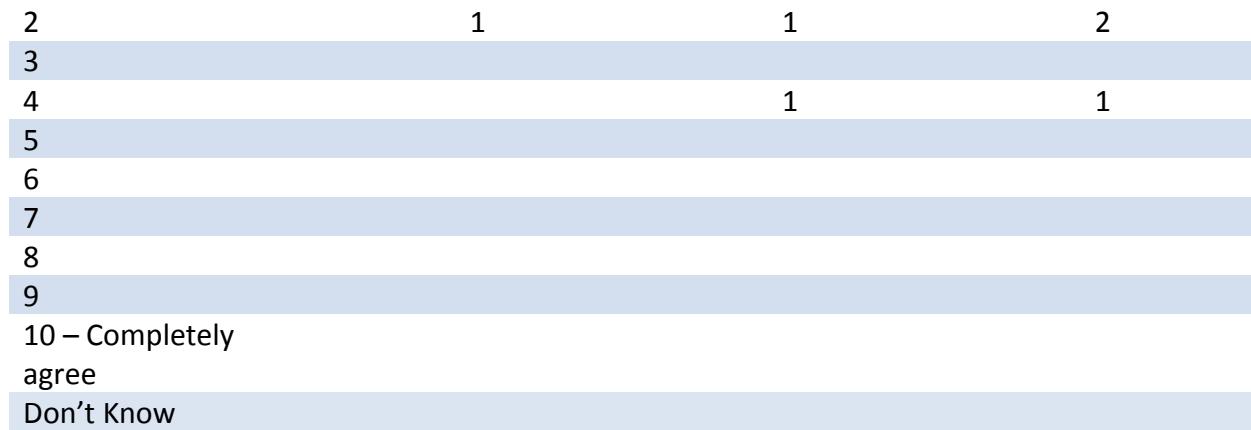


AK11. I have to take the lead in my *own* household if we're going to keep our utility bills down.

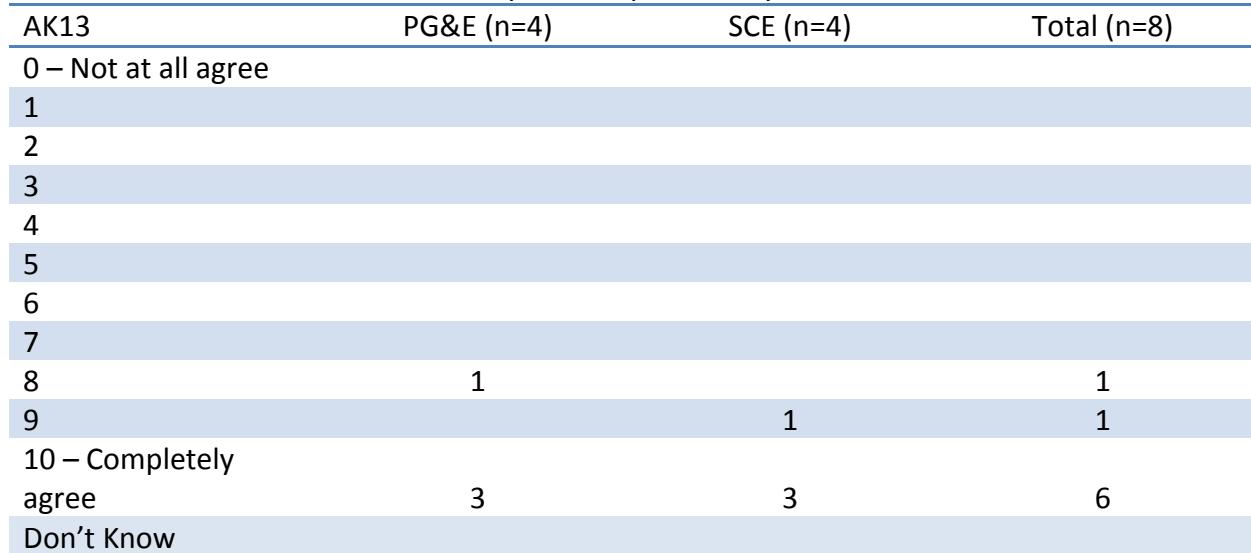


AK12. It is not my responsibility to use as little energy as possible to help the environment.





AK13 I intend to conserve on electricity consumption in my *own* home this summer.



## Closing

CL1. Those are all the questions I have. What else do you think we would want to know about your experiences with the program based on our conversation today?

---

CL1	Utility
"Every single one of my employees is a believer. Their PG&E bills are very low. One aspect of 'comfort' in a home is being able to run your furnace or AC as much as you like because the home is so efficient that the electric bills will always be low. You don't have to worry about it."	PG&E
"Equipment purchase help, either renting or financing."	SCE
"The SCE Quality Installation program uses Right Soft and Elite. It would be nice to	SCE

have the same software for both programs."

### 4.2.3. Group C: On the EUC list and has completed a few projects

#### Contractor Background

C1. Can you describe the types of services you provide to customers? (Multiple response)

C1	PG&E (n=4)	SCE (n=4)	Total (n=8)
HVAC	3	4	7
Building audits and testing	4	4	8
Windows	1	4	5
Insulation	2	4	6
Home remodeling	1	3	4
New home construction		2	2
Other (Specify)	3	4	7

C2. How many employees does your company have serving SCE territory?

C2	PG&E (n=4)	SCE (n=4)	Total (n=8)
0	3		3
1 – 5		1	1
6 – 10		2	2
11 – 15		1	1
No answer	1		1

C3. How many employees does your company have serving PG&E territory?

C3	PG&E (n=4)	SCE (n=4)	Total (n=8)
0		3	3
1 – 20	2	1	3
21 – 40	1		1
40 – 60	1		1

#### BPI Certification

B1. Is your company accredited by BPI?

B1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	3	4
No	3	1	4

B1A. If no, can you tell me why it isn't?

B1A	Utility
"100% of my jobs have to be BPI jobs, which we are not doing."	PG&E
"Doesn't bring extra value to our business. The requirements are steep."	PG&E
"Small Company"	PG&E
"The money is too much."	SCE

B1B. If yes, did you receive financial aid from an outside source to do so?

B1B	PG&E (n=1)	SCE (n=3)	Total (n=4)
Yes			
No		2	3
Not applicable	1	1	1

B2. How many BPI certified individuals does your company have in SCE territory?

B2	PG&E (n=4)	SCE (n=4)	Total (n=8)
0	4		4
1 – 5		2	2
6 – 10		2	2

B3. How many BPI certified individuals does your company have in PG&E territory?

B3	PG&E (n=4)	SCE (n=4)	Total (n=8)
0		4	4
1 – 5	3		3
6 – 10	1		1

B4. What role(s) do these BPI certified personnel play relative to EUC installations and procedures?

(Showing # that said "yes" to role)	PG&E (n=4)	SCE (n=4)	Total (n=8)
Perform combustion appliance safety testing	4	4	8
Perform the EUC installations and procedures themselves	3	3	6
Teach others the appropriate procedures	2	3	5
Assure quality of others' EUC work	4	4	8
Perform test in and test out	4	4	8
Conduct energy modeling	4	4	8
Other			

B5. What is your opinion of the BPI approach? Why do you say that?

B5	Utility
"Awesome. A Breath of fresh air. WH is great, and I wish I had learned about it sooner."	PG&E
"Very good for homeowners that have funds, but many suggestions are not marketable or affordable."	PG&E
"It's good. A huge step from what was there before."	PG&E
"Don't think it is the right approach. Test-in combustion safety testing takes so much time and is no benefit except on test out. Blower door and duct blasting at the beginning, then CST at the end."	PG&E
"It's good, but HERS is more suited for these kinds of projects. HERS is much more responsive as an organization."	SCE
"The standard is high, and it is good for the environment and good for the customer. However, people who interpret BPI differently. The procedures can be different, like on pressurization."	SCE
"As compared to HERS, BPI includes comfort and safety, so it is more appropriate."	SCE
"As opposed to what? It does have the combustion safety element, which makes it appropriate."	SCE

### Program Impressions and Barriers

PA1. Our records indicate that you have submitted a few projects through the program so far. Can you explain why your company has not submitted a larger volume of projects through the program?

PA1	Utility
"Cost of initial testing is prohibitive."	PG&E
"Program feels like it changes frequently, which undermines confidence. It can take a month between an assessment and a job, and dealing with customer questions about the EUC program adds time and drives down profitability on EUC jobs. We could be spending that time on our core business."	PG&E
"We are a small company and the paperwork is time consuming. It doubles for each other program, because they all need their own. Like CHF."	PG&E
"SMUD pays for audits, which is good, but it also means that most people who get a free audit are not really interested in retrofits and are just "kicking the tires". HVAC contractors are using it to get rebates on systems they would have installed anyway."	PG&E
"Training took some time. We are a BPI affiliate, so we have spent a lot of time training others."	SCE
"Paperwork."	SCE
"This is a small company. Haven't marketed it very much yet. We are ramping up and training."	SCE

PA2. The program is interested in finding ways to encourage contractors to submit more jobs through the program. Please tell me if any of the following are reasons for why your company has not yet submitted many jobs to [IOU] in the program so far?

PA2A-I (Showing # that said "yes" to barrier)	PG&E (n=4)	SCE (n=4)	Total (n=8)
Paperwork required	2	3	5
Training required	1	1	2
Availability of local trainings	1	2	3
Not sure if program will be around for a long time	2	1	3
Rebate processing time	2	2	4
The incentives are not high enough	2	4	6
The sales and marketing required	2	2	4
The necessary tools needed to do the assessment and upgrade work		2	2

PA3. Are there any other reasons for why your company has not submitted a greater number of jobs that we haven't covered?

PA3	Utility
"Upfront assessment cost is prohibitive. A lot of leads were a result of CHF, which is over."	PG&E
"No."	PG&E

"CHF financing was helpful, but it is gone."	PG&E
"SMUD Rebates. Free assessments don't attract projects."	PG&E
"The paperwork is prohibitive, takes a long time, and requires its own training. The upfront cost to the client is prohibitive. Even assessment costs are prohibitive, so I have to offer free assessments."	SCE
"It takes too long. The modeling process is open to interpretation, and it is not always right, so it makes it difficult when the post-test doesn't add up and they can't get as much as they wanted for a rebate."	SCE
"Superfluous number of test-in test-outs. HERS, BPI, RHA, and CHF all required test-in, test-out, so that takes a lot of time and overhead."	SCE
"The modeling is not accurate. The standards and quality are not strict enough to ensure savings, especially on quick and dirty jobs."	SCE

PA4. What do you think the utility could do or say to help you submit more jobs through the program?

PA4	Utility
"Subsidize the audits, simplify the process. The paperwork is lengthy with lots of back and forth."	PG&E
"After submitting things to Compass, BIG should send an email whenever they make a change or a note on the record in the Compass system. That would make things much, much easier. BIG also needs better customer service in general."	PG&E
"More funding. CHF financing did not require a credit check, which was good."	PG&E
"PACE Financing, or CHF."	PG&E
"Vouchers for audits would give an immediate benefit."	SCE
"Contractors want to talk to somebody, not exchange emails back and forth all the time. Streamline the process and have less back-and-forth. Stamp it and start the work. It delays everything."	SCE
"Streamline the test-in and test-out. A confirmation of rebates during the approval process, because they are delayed for so long."	SCE
"Co-opable marketing. SDG&E pays 70% of marketing costs. Also, better SCE communication in riverside and Orange County. Streamline the program."	SCE

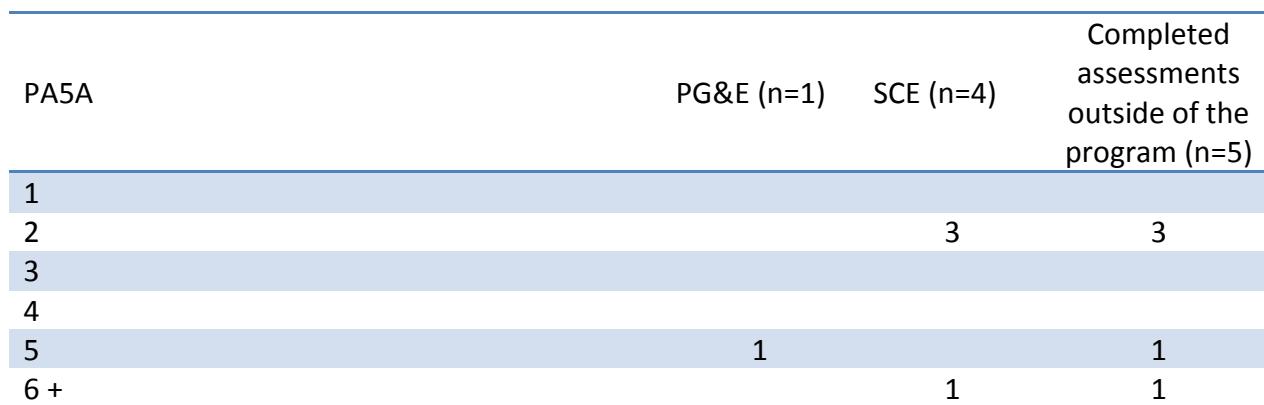
PA5. Have you completed any home energy assessments or audits outside of the program in the last year?

PA5	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	4	5
No	2		2
Don't know	1		1

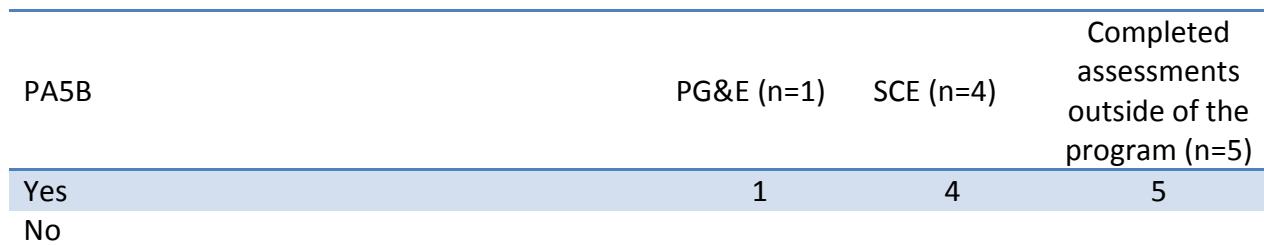
Not applicable

Other: "Yes. Customers don't want to wait for the test-in-the approval, the test out, the next approval. They want to spend their tax return right away, not wait. They want it now, so if I offer a discount on fewer measures, they would rather do that than wait and go through all the EUC program measures. People want it done by the time they are off of vacation, not take more time off." – SCE Contractor

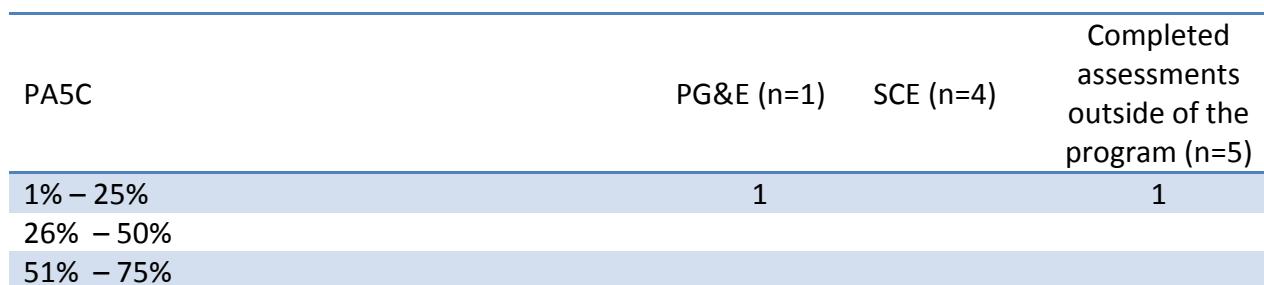
PA5A. If yes, how many home assessments have you done outside of the program so far?



PA5B. Did you use the BPI (Building Performance Institute) protocol or some other assessment protocol?



PA5C. Among these customers, about what percentage would have qualified for program rebates based on potential savings indicated by the assessments?



76% – 100%	2	2
Not applicable	1	1
Other: "Both" – SCE Contractor		

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PA6. How many home energy assessments or audits have you completed as part of the program in the last year?

PA6A	PG&E (n=4)	SCE (n=4)	Total (n=8)
1–10	2	1	3
11–20		2	2
21–30	1		1
31+		1	1
Don't know	1		1

PA6A. Did any of those turn into JRTs and Reservation submittals?

PA6A	PG&E (n=4)	SCE (n=4)	Total (n=8)
1–5	3	3	6
6–10	1		1
11–15		1	1

PA6B. If not, why not?

PA6B	Utility
"These three didn't feel like the savings were worth it."	PG&E
"Customers don't want to wait for the test-in-the approval, the test out, the next approval. They want to spend their tax return right away, not wait. They want it now, so if I offer a discount on fewer measures, they would rather do that than wait and go through all the EUC program measures. People want it done by the time they are off of vacation, not take more time off."	SCE
"The year ended, but I still have many open projects."	SCE

PA7. On average, about how many customers do you contact before you are able to complete one energy assessment?

PA7	Utility

"3"	PG&E
"No outbound marketing."	PG&E
"10,000 door knockers = 25 assessments."	PG&E
"Depends on how it is marketed. 10 of 10 flyers. It is a high conversion rate."	SCE
"10 to 15"	SCE
"75%, successful."	SCE

PA7A. Do you offer a free in-home walk-through, or do you have the homeowner commit some money to the cost of the assessment?

PA7A	Utility
"No."	PG&E
"Through SMUD rebates."	PG&E
"CHF money covered assessments, but now they cost \$400, which is prohibitive."	PG&E
"SMUD rebate covers the audit."	PG&E
"Yes. High income and educated areas respond."	SCE
"Yes."	SCE
"Yes."	SCE
"Yes, case by case."	SCE

CB4. About what percentage of assessments don't go forward due to lack of financing. About how many jobs does this represent?

CB4	Utility
"None, but some assessments weren't scheduled."	PG&E
"A large percent. CHF was very useful; all 35 jobs have had CHF financing."	PG&E
"5."	PG&E
"In the beginning it was 100%."	SCE
"80%"	SCE
"90%"	SCE
"50%,1"	SCE

CB5. How do you think program-based financing could best be structured to make customers more likely to proceed with the job after an assessment?

CB5	Utility
"CHF was good, but I had to hire others, instead of using internal people, due to the job creation element."	PG&E

"It should be through some organization we are already dealing with, because making it more complex by dealing with another organization will make it less likely that we will use it."	PG&E
"CHF took 3 weeks to come through. It would be helpful to have progress updates, or maybe installments if necessary."	PG&E
"Yes."	PG&E
"The cost of the contractor's materials should be paid for by financing first, so the work can start right away. Like escrow."	SCE
"PACE, or LA County"	SCE
"EGIA is good. CHF is good, but it takes way too long to get paid. The application process is a nightmare."	SCE
"Long term and low interest. 10 years, or 5 years low interest."	SCE

---

CB5A. Who would receive the financing? Contractor or customer?

CB5A	PG&E (n=4)	SCE (n=4)	Total (n=8)
Contractor	4	2	6
Customers		1	1
Other: "Yes" – SCE customer			

CB5B. What would be the terms?

CB5B	Utility
"CHF was good, but I had to hire others, instead of using internal people, due to the job creation element."	PG&E
"3% financing."	PG&E
"PACE is good. CHF is good."	PG&E
"0%, Included in the utility bill. Simple is good."	SCE
"Long term and low interest. 10 years, or 5 years low interest."	SCE

PA8. Are you aware of Los Angeles County's participation in the Energy Upgrade program?

PA8	SCE (n=4)
Yes	4

No

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PA8. Were you aware of the following LA County EUC program components before this call?

(Showing # that said “yes” to program components)	SCE and aware of LA County’s participation in the EUC program (n=4)
Additional incentives of \$1000-\$4000 on top of the utility incentives	4
Scholarships to reimburse you for training certifications	4
2% financing for homeowner energy upgrades	2
Regular program updates such as e-blasts and newsletters	2
TV, radio, and print ads drumming up homeowner demand	3

PA9. Have you heard of the “flex path”?

PA9	SCE (n=4)
Yes	2
No	2

PA91. What do you know about it? How does it compare to the basic and advanced packages?

PA91	Utility
“It seems like it would be a good gateway program.”	SCE
“Everybody seems to like that. I’m working on one right now.”	SCE

### **Contractor Recruiting, Training, and Mentoring**

R1. How many of your employees attended the EUC Participation Workshop?

R1	PG&E (n=4)	SCE (n=4)	Total (n=8)
1	3	3	3
2		1	1
3		2	2

4	1	1
5		
6		
7	1	1

R1A. After attending the Participation Workshop, did you feel that your organization was prepared to participate in the EUC program?

R1A	PG&E (n=4 )	SCE (n=4)	Total (n=8)
Yes	2	1	3
No	1	3	4
Don't know	1		1

R1A. If no, why not?

R1A	Utility
"It piqued my interest, but not for long enough. I need deeper training to participate."	PG&E
"I had to attend several to convince me. Everybody had the impression that the only people making money were the BPI teachers there are too many changes. There are a lot of programs out there that you could take off of the shelf and have it work, but here we are trying to re-invent the wheel. There are so many changes."	SCE
"Presentations are factual, but little practical assistance in getting started."	SCE
"It too BPI training and 20 years experience. Mentoring would be better."	SCE

R2. How many of your employees attended the 3-day Basic Path training offered by [IOU]?

R2	PG&E (n=4)	SCE (n=4 )	Total (n=8)
0	1	1	2
1	1		1
2	1		1
3		1	1
Don't know		1	1
Other	1	1	2

R2A. After attending Basic Path training, did you or your staff feel prepared to perform the tasks required for the Basic Upgrade Package?

R2A	PG&E (n=2 )	SCE (n=1)	Employees attended 3-

	day training (n=3)		
Yes	1	1	2
No			
Don't know	1		1

R2B. If no, why not?

R2B	Utility
"Already BPI trained"	PG&E
"I had to attend several to convince me. Everybody had the impression that the only people making money were the BPI teachers there are too many changes. There are a lot of programs out there that you could take off the shelf and have it work, but here we are trying to re-invent the wheel. There are so many changes."	SCE

R3. What training did your BPI certified personnel complete to help them obtain the certification?

R3	Utility
"EverBlue."	PG&E
"CBPCA."	PG&E
"CBPCA."	PG&E
"Everblue."	PG&E
"We are a BPI affiliate and offer BPI training to others, so we trained everyone in-house."	SCE
"Long Beach City College, Trade-Tech, Workforce programs."	
"CalCerts. EUC free training."	

R3A. Who sponsored this training?

R3A	Utility
"No."	PG&E
"None."	PG&E
"CBPCA."	PG&E
"No."	PG&E
"Joseph Oldham, Valley Tune Up Program (ARRA)."	SCE
"No."	SCE

R3B. How many days of training did this involve?

R3B	PG&E (n=4)	SCE (n=4 )	Total (n=8)
1 week – 2 weeks	4	1	5
2 weeks –3 weeks			
3 weeks – 1 month			
1 month or more		1	1
Not applicable		1	1
Don't know		1	1

R3C. Did you receive a scholarship or a loan to finance the training?

R3C	PG&E (n=4)	SCE (n=5)	Total (n=8)
Yes	1	1	2
No	3	1	4
Don't know		1	1
Not applicable		1	1

R3C-1. What?

R3C-1	Utility
"CBPCA."	PG&E
"LA County."	SCE

R4. Have any of your staff who are not BPI certified received training that would help prepare them to implement EUC measures and procedures?

R4	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	3	6
No			
Not applicable	1	1	2

R4A. If yes, what training did they receive?

R4A	Utility
"Internal"	PG&E
"Some BPI training, though not certified. Also marketing and SMUD program training."	PG&E
"Air Sealing, Duct Sealing"	PG&E
"Internal"	SCE

“Many different kinds, including sales and marketing”	SCE
	SCE

R5. What types of employees are responsible for the EnergyPro software modeling required for the program?

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R5	Utility
“Comfort Advisor. Sales representative.”	PG&E
“Home performance consultant.”	PG&E
“Owner”	PG&E
“Owner”	PG&E
“Owner”	SCE
“Owner”	SCE
“Project Managers.”	SCE
“President”	SCE

R6. Did anyone in your company use EnergyPro or any other home energy modeling software before participating in the program?

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R6	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	3	4
No	3	1	4

R6A. If another software, which one?

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R6A	Utility
“Wrightsoft, Loadstar”	PG&E
“HomeGuage, PalmTech”	SCE
“RightSoft for sizing HVAC”	SCE
“Rightsoft. Recurve”	SCE

R6A. Have you received instruction on how to use the EnergyPro software program?

---

R6A	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	4	8
No			

R6A-A. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the EnergyPro instruction you received?

R6A	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all helpful			
1			
2		1	1
3			
4			
5			
6			
7	1	1	2
8	1		1
9	1	1	2
10 – Very helpful	1	1	2

R6A-B. If no, why not?

Not applicable to any respondent.

R6A-B	Utility
"It wasn't detailed enough, with 30 students.I learned more from taking HERS 2"	SCE

R7. Did you receive training on how to size HVAC equipment based on the expected energy use and size of the home?

R6A	SCE (n=4)
Yes	1
No	2
Not applicable	1

R7A. If yes, on a scale of 0-10 with 0 being not at all and 10 being very much, how much did you benefit from this training?

R7A	SCE and received training (n=1)
0 – Not at all beneficial	
1	
2	
3	
4	
5	
6	

7	
8	
9	
10 – Very beneficial	1

---

R8. Are you currently participating in SCE's Energy Star Residential HVAC Quality Installation Program (QI)?

R8	SCE (n=4)
Yes	2
No	2

---

R9. Have you attended any BPI training at [IOU] Energy Education Centers?

R9	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	3	5
No	2	1	3

---

R9A. If yes, did you complete the classroom training?

R9A	PG&E (n=2)	SCE (n=3)	Attended BPI training (n=5)
Yes	2	3	5
No			

---

R9B. If yes, did you complete the field training?

R9B	PG&E (n=2)	SCE (n=3)	Attended BPI training (n=5)
Yes	1	3	4
No	1		1

---

R9C. If yes, have you completed your first job?

R9C	PG&E (n=2)	SCE (n=3)	Attended BPI training (n=5)

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Yes	1	3	4
No	1		1
Don't know			
Not applicable			
Other:			

R10. Have you received any mentoring related to the EUC program?

R10	PG&E (n=3)	SCE (n=3)	Total (n=5)
Yes	1	2	3
No	2	2	4
No Answer	1		1

R10A. If yes, which type(s) did you receive?

(Showing # that said "yes" to program components)	PG&E (n=1)	SCE (n=2)	Received mentoring (n=3)
Field / Data Collection	1	1	2
JRT (Job Reporting Template)/ Job Processing		1	1
Energy Pro software		1	1
Mentoring received during onsite Quality Control inspection	1	2	3

R10B-1. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the Field / Data Collection mentoring you received?

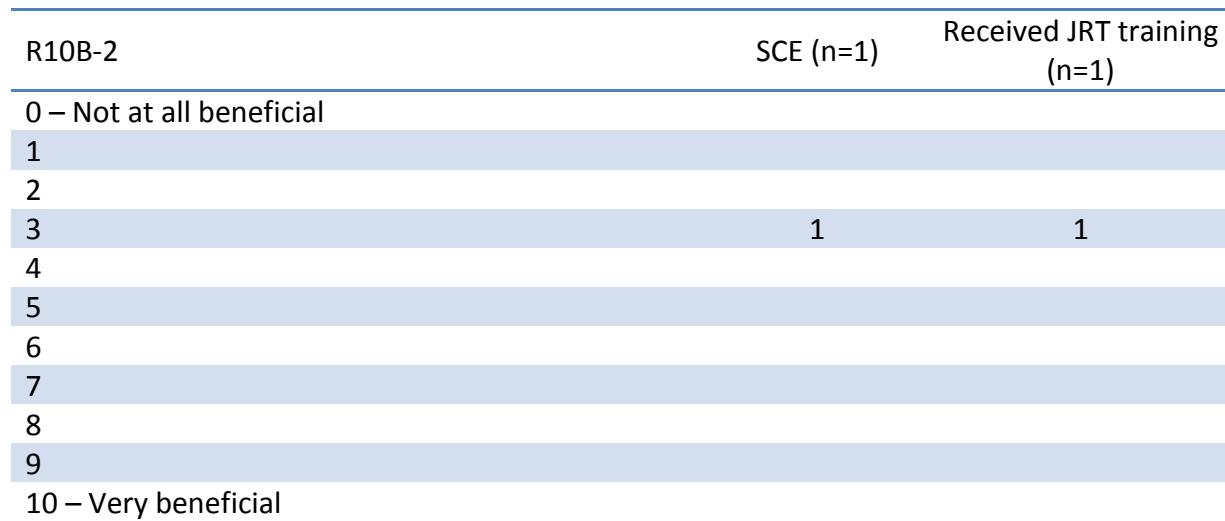
R10B-1	PG&E (n=1)	SCE (n=1)	Received field / data collection training (n=2)
0 – Not at all beneficial			
1			
2			
3		1	1
4			
5			
6			
7			
8	1		1

9

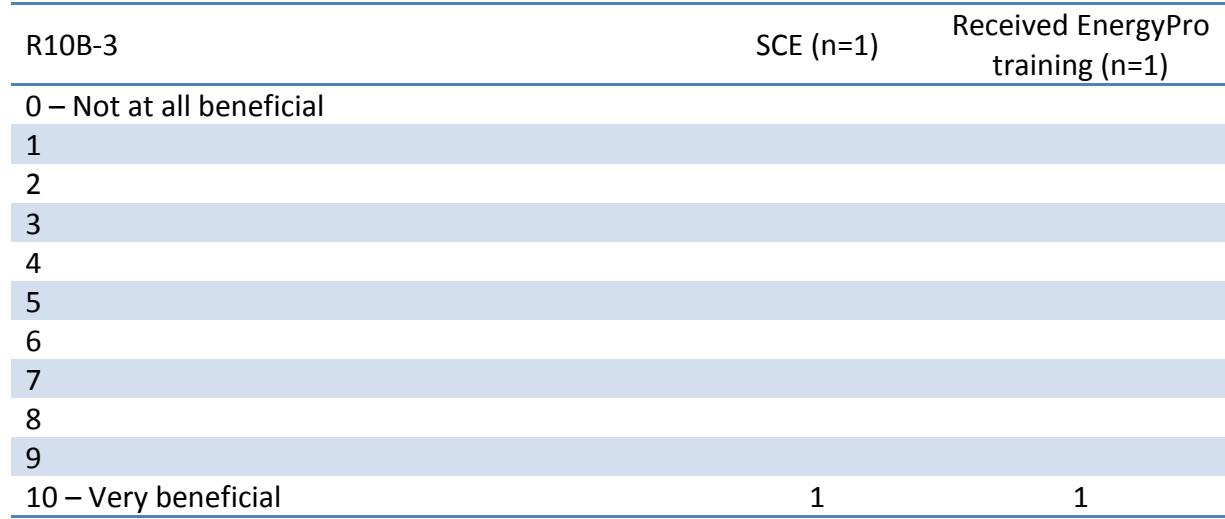
10 – Very beneficial

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R10B-2. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the JRT (Job Reporting Template)/ Job Processing mentoring you received?



R10B-3. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the Energy Pro software mentoring you received?



R10B-4. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the mentoring received during onsite Quality Control inspection?

R10B-4	PG&E (n=1)	SCE (n=2)	Received onsite mentoring (n=3)
0 – Not at all beneficial			
1			
2			
3		1	1
4			
5			
6			
7			
8	1		1
9			
10 – Very beneficial		1	1

R11. What other types of EUC-related training would benefit you or your staff?

R11	Utility
“In-house.”	PG&E
“HVAC, lighting, windows”	PG&E
“They offered this too good to be true free-package, then they turned around and charge \$600-\$700 dollars. Even with some reimbursing, that is a lot to fork out.”	SCE
“HVAC”	SCE
“EnergyPro advanced training”	SCE
“Yes. Insulation. BPI.”	SCE

R12. Do you or your company have an interest in getting additional training on how to best market your company and its services?

R12	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	3	6
No	1	1	2
Don't know			
Not applicable	1		1

R12A. If no, why not?

R12A	Utility
“Lack of coordination between SMUD & PG&E, rebate levels are a mystery.”	PG&E

“I'm not a sales person It takes a lot of money and time, which we don't have.”

SCE

---

### **Sub-contracting**

SC1. Do you sub-contract the rebate application paperwork to another entity?

SC1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes			
No	4	4	8

SC1A. If yes, why?

Not applicable to any respondent.

SC2. Do you sub-contract any part of the BPI energy assessment out to another entity?

SC2	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes			
No	4	2	6
Not applicable		2	2

SC2A. If yes, why?

Not applicable to any respondent.

SC2B. Which portion of the BPI energy assessment is contracted?

Not applicable to any respondent.

SC2C. Is this for all jobs, advanced and basic package alike?

Not applicable to any respondent.

SC3. Do you sub-contract installation of any of the possible retrofit measures to another entity?

SC3	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	4	8

No

---

SC3A. If yes, why?

SC3A	Utility
“Not our core competency.”	PG&E
“Don't have the expertise.”	PG&E
“Not our core competency.”	PG&E
“We hire subcontractors due to expertise and time constraints, but supervise their work.”	SCE
“I don't have the right equipment. Crawlspaces are difficult, so we don't often do walls, but we can do an attic.”	SCE
“We are a small company.”	SCE

---

SCB. Which measures are contracted out? (Multiple response)

SCB	PG&E (n=4)	SCE (n=4)	Total (n=8)
HVAC	1		1
Lighting	2	1	3
Painting	2		2
Windows	4	2	6
Doors	4	1	5
Roofing	4	3	7
Insulation	1	2	3
Plumbing	3	1	4
Other (Specify)			

SC4. Who pulls the permits for the jobs, when needed?

SC4	PG&E (n=4)	SCE (n=4)	Total (n=8)
General	3	2	5
Specialty contractors	1	2	3

## EnergyPro

E1. Do you think EnergyPro covers the major opportunities for energy efficiency?

E1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	2	3
No	2	2	4
Don't know	1		1

E1A. If not, why not?

E1A	Utility
"Doesn't model air-infiltration well, which is one of the BPI standards. That would allow us to make a better sell to the customers. It doesn't understand variable capacity gas valves, or 2 stages HVAC."	PG&E
"Doesn't allow input of current usage. Which would be useful to sell the job to the customer."	PG&E
"Not possible to model a knee wall in attic space"	SCE
"Mostly related to HVAC. Load sizing doesn't deal with wall conditions very well. Climate zone borders re tricky, since it can use the "average" home in that area, but the difference between an "average" home and an actual one can be dramatic."	SCE

E2. Do you think EnergyPro is accurate in its estimates?

E2	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	1	2
No	3	3	6

E2A. If not, why not?

E2A	Utility
"Doesn't model air-infiltration well, which is one of the BPI standards. That would allow us to make a better sell to the customers. It doesn't understand variable capacity gas valves, or 2 stage HVAC."	PG&E
"It always has low estimates on Air Sealing. It doesn't match the information on Energy Star.gov."	PG&E
"Case by Case no, it doesn't take into account occupant behavior"	PG&E
"Pool pumps are not on there. Smaller devices in the home are not taken into account (i.e microwaves, etc.)"	SCE
"Nothing is 100%, but you do the best you can. You have to understand the system"	SCE

too, otherwise it won't work. I have the right background, and HER2, but teaching it to my employees is difficult."

"Mostly related to HVAC. Load sizing doesn't deal with wall conditions very well. Climate zone borders are tricky, since it can use the "average" home in that area, but the difference between an "average" home and an actual one can be dramatic." SCE

E3. What do you think are the main pros and cons to using EnergyPro?

E3	Utility
"Great piece of software, keep it up to date"	PG&E
"Otherwise it is great."	PG&E
"Good idea, but it needs to use real usage data from pre-and post audit."	PG&E
"It is usually very flexible"	SCE
"Nothing is 100%, but you do the best you can. You have to understand the system too, otherwise it won't work. I have the right background, and HER2, but teaching it to my employees is difficult."	SCE
"Fairly easy to use"	SCE
"Mostly related to HVAC. Load sizing doesn't deal with wall conditions very well. Climate zone borders are tricky, since it can use the "average" home in that area, but the difference between an "average" home and an actual one can be dramatic."	SCE

E4. Does your company use any other software programs to model estimated energy usage outside of the EUC program?

E4	Utility
"No"	PG&E
"Energy circle. It measures actual usage over the whole house."	PG&E
"HomeGuage, PalmTech"	SCE
"No"	SCE
"RightSoft"	SCE
"ReCurve"	SCE

### Customer Sales/Marketing

CS1. Has your company been actively promoting the program to new or existing customers?

CS1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	2	5
No	1	2	3

CS1A. If not, why not?

CS1A	Utility
“We are a small company, and marketing costs money.”	PG&E
“I did in the beginning, but now it depends on the customer.”	SCE

CS1B. If so, please describe who you have been promoting the program to.

CS1B	Utility
“Existing customers”	PG&E
“Our website, homeshows, in-home appointments”	PG&E
“10,000 door hangers”	PG&E
“Door hangers, flyers, workshops, working with real-estate agents.”	SCE
“People who want to be green, who want the job done right, and who might have enough money. They also have to be willing to wait.”	SCE
“Events, talk to customers about it on the job”	SCE

CS2. What marketing has your company done to get customers interested in a EUC retrofit?

CS2	Utility
“Just in-field discussions”	PG&E
“Door hangers, our own website”	PG&E
“Door hangers, flyers, workshops, working with real-estate agents.”	SCE
“I one newspaper add, but I only got a couple calls, and they thought it was free.”	SCE
“Pamphlets from the EUC field rep”	SCE
“Added a page to our website. We are not aware of SCE co-op funds.”	SCE

CS3. What sales tools do you use to present information to prospective customers?

CS3	Utility
“Just in-field discussions.”	PG&E
“Energy assessment reports, brochures, iPads with videos.”	PG&E
“The Rebate.”	PG&E
“walkthroughs, Door hangers, our own website.”	PG&E
“Door hangers, flyers, workshops, working with real-estate agents.”	SCE

"Printouts about the program."	SCE
"Flyers, laminated documents about testing. EUC testimonials. No-obligations until proposal is made. Education and rapport."	SCE
"A conversation over the phone with a trained tech who can explain things. We can reduce the audit price."	SCE

CS4. What types of messages seem to motivate customers to get the work done? Is there a combination of messages that is especially effective?

CS4	Utility
"1st Saving Energy, 2nd Comfort, 3rd Health, Also educating about WH and why it is important."	PG&E
"Saving money is the main message, but also promoting the WH approach and increasing home values."	PG&E
"Saving Money, then Comfort. It depends on the interview with the customer at the beginning of the process."	PG&E
"1st Saving Money, 2nd Comfort."	PG&E
"1st Saving Energy, 2nd is Comfort. Though they don't realize what comfort is till after the job is done."	SCE
"People who want to be green, who want the job done right, and who might have enough money. They also have to be willing to wait."	SCE
"Depends on client. Feel them out on initial consultation. In the central valley, Saving Energy and Saving Money are the most effective."	SCE
"1st is comfort, 2nd is saving energy/money, 3rd Safety. It depends on the customer. The audit has to be easily accessible and get the customer involved with pictures, demonstrations, etc. Financing is helpful."	SCE

CS4. Would audit subsidies help close a retrofit sale?

CS4	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	4	7
No			
Don't know	1		1

CS4A. Why yes or no?

CS4A	Utility
"Don't advocate free audits. Either paying some, or a rebate, so they have to invest	PG&E

something, to weed out those that are not serious."	
"I have done it before."	PG&E
"It would get more people in. It will educate people about the possibilities. It is just like a doctor telling you what is wrong with you."	SCE
"Valley tune up program subsidizes free assessments"	SCE
"It has worked to lower the price."	SCE

CS5. Have you used other programs in combination with EUC to help sell the job?

CS5	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	4	6
No	1		1
Not applicable	1		1

CS5A. If yes, what other programs?

CS5A	Utility
"CHF Financing, SMUD assessment rebates."	PG&E
"CHF Financing"	PG&E
"National Housing Fund. CHF"	SCE
"LA County, Whatever they say they deliver it on time."	SCE
"Valley tune up program subsidizes free assessments"	SCE
"Tax credits. Gas company rebates on furnaces. Manufacturer rebates."	SCE

CS6. Have any customers come to you inquiring about the program?

CS6	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	4	7
No			
Don't know	1		1

CS6A. Where do your customers typically hear about the program?

CS6A	Utility
"EUC Website."	PG&E
"EUC Website."	PG&E

“The EUC Website. It has been very effective in generating leads.”	PG&E
“EUC Website.”	SCE
“Only 2 and they heard about it from their church.”	SCE
“EUC Website.”	SCE
“EUC Website.”	SCE

CS7. In your opinion, what types of advertising or marketing are the most effective in generating customer interest in EUC?

CS7	Utility
“Consumer education. Instead of contractors becoming sale people, customers should be educated about the benefits of WH. They want an immediate result.”	SCE
“Talking to them.”	SCE

### Contractor Participation

C1. Is there anything that [IOU] could do to help you complete more jobs through the program?

C1	Utility
“Higher rebate, financing, and advertising”	PG&E

C2. Do you know of any financing sources for customers?

C2	Utility
“Yes. Our own banks who we have a relationship with.”	PG&E
“Yes, Wells Fargo, GE, SMUD”	PG&E
“Yes.”	PG&E
“Yes.”	PG&E
“Admiral lenders, (LA County) Matador, Credit Unions, Green EE Mortgages.”	SCE
“EGIA, EECU (Credit Union), Energy Efficient mortgages.”	SCE
“Yes, Through HVAC manufacturers”	SCE

C2A. If yes, do you refer customers directly to those financing sources?

C2A	PG&E (n=4)	SCE (n=4)	Total (n=8)
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Yes	1	3	4
No	2		2
No answer		1	1
Other: "CHF." – PG&E Contractor	1		1

C2B. Do you think this helps to sell the program?

C2B	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	3	7
No			
No answer		1	1

CP4. About how long does it take to receive final payment from the customer for a job after it is completed?

CP4	Utility
"Immediately."	PG&E
"Immediately"	PG&E
"0-1"	PG&E
"5 days"	SCE
"Immediately"	SCE
"Depends on financing. EGIA = 48 hours. Otherwise it is immediately."	SCE
"Immediately, but sometimes I have to wait for the rebate."	SCE

CP5. Do you currently float the rebate?

CP5	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	2	3
No	2	2	4
Don't know	1		1

CP5A. If yes, do you think this is helpful in recruiting customers to the program?

CP5A	Utility
"Yes, as long as there is some assurance. Sometimes EnergyPro misses something, and the rebate is not as large as it was assumed. When that happens, we are stuck	PG&E

with the smaller rebate.”

CP5B. If no, would you do this if you had financing to help with it?

CP5B	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	1	3
No		1	1
Don't know	1	2	3
Not applicable	1		1
Other: “No. It is too much hassle. Also, it helps the workers to have the payment at the end of the job as motivation for quality and speed.” – SCE Contractor			

CP5C. Would you be interested receiving this kind of loan from [IOU]?

CP5C	Utility
“Yes, as long as there is some assurance. Sometimes EnergyPro misses something, and the rebate is not as large as it was assumed. When that happens, we are stuck with the smaller rebate.”	PG&E
“Yes.”	PG&E
“Yes.”	PG&E
“No. It is too much hassle. Also, it helps the workers to have the payment at the end of the job as motivation for quality and speed.”	SCE
“Yes, but whatever the initial rebate energy pro-generates needs to be concrete, otherwise it seems like the contractor is a liar. It needs to be set up front at the start.”	SCE

CP5D. Do you think it would help with recruiting customers to be able to float the rebate (with financing)?

CP5D	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	1	2
No	1		1
Don't know	2	3	5
Other: “Yes, because the money is up front and subtracted from the upfront cost.” – SCE Contractor			

### Customer Participation Barriers

CB1. What do you think keeps customers from participating in the program in general?

CB1	Utility
“\$ and financing.”	PG&E
“They don't realize what comfort is till after the job is done.”	SCE
“The time it takes to get this going. Some customers don't want a lot of people going in and out of their house. They just want to get the job over with.”	SCE

CB2. What do you think are the top three reasons customers decide not to move forward from the energy assessment to a retrofit?

CB2	Utility
“The cost is more than expected. Not able to show enough EE improvement.”	PG&E
“Money. Also, they are basing their expectations on contractors doing cheap items incorrectly. Afraid of debt.”	PG&E
“The measures are not cost effective in the short term”	PG&E
“They don't realize what comfort is till after the job is done.”	SCE
“The time it takes to get this going. Some customers don't want a lot of people going in and out of their house. They just wn tot get the job over with.”	SCE
“Failing to qualify for financing. We are not the cheapest contractor, and some are very price conscious.”	SCE
“Low modeled savings, low utility bills.”	SCE

CB4. What do you think motivates customers to participate in the program?

CB4	Utility
“Financing, and Money.”	PG&E
“1st Comfort, 2nd Rebate Savings, 3rd Environment.”	PG&E
“1st Saving Energy, 2nd is Comfort.”	SCE
“Green. People who want to do the right thing and save energy.”	SCE
“Comfort, take advantage of rebates”	SCE

CB3. Do you have any ideas as to how the program can get these customers to move forward?

CB3	Utility
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“Financing, and Money.”	PG&E
“EE is here for good, even if specific programs are not. There will be a lot of State and Local support.”	PG&E
“Education.”	SCE
“Make it take less time. People want to spend their tax return now, not wait weeks for a rebate and for many different people to come in and out of their home for audits.”	SCE
“Financing.”	SCE

## Market Effects

ME1. Did you learn any new job skills from the program?

ME1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	2	5
No	1	1	2
Not applicable		1	1

ME1A. If yes, what skills did you learn?

ME1A	Utility
“BPI”	PG&E
“The WH approach. Windows, insulation, air quality, solar-thermal.”	PG&E
“HERS”	PG&E
“Sales, BPI certification”	SCE
“Air sealing, and insulation”	SCE

ME2. Did you or your company hire additional employees as a result of the program?

ME2	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	2	4
No	2	2	4

ME2A. If yes, approximately how many new employees were hired?

ME2A	PG&E (n=2)	SCE (n=2)	Hired additional employees (n=4)
1 – 5	2		2
6 – 10		1	1
11 or more		1	1

ME2B. Did these employees receive EUC training (before or after they were hired)?

ME2B	PG&E (n=2)	SCE (n=2)	Hired additional employees (n=4)
Before			
After	1		1
Both		2	2
Did not receive training	1		1

ME2C. What is their expected duration of employment?

ME2C	PG&E (n=2)	SCE (n=2)	Hired additional employees (n=4)
2 months	1		1
Permanent	1	2	3

ME2D. Do you do the EUC work through a special department of your company, or is it an integral part of your operations?

ME2D	PG&E (n=2)	SCE (n=2)	Hired additional employees (n=4)
Special department	1		1
Integral	1	2	3

ME3. Are you or your company planning to add more staff as a result of program?

ME3	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	4	5
No	3		3

ME3A. If yes, approximately how many are you planning to add?

ME3A	PG&E (n=1)	SCE (n=4)	Planning to add more staff (n=5)
2	1		1
3		1	1
4		1	1
5 or more		1	1
Don't know	1		1

ME3B. Will these employees be EUC certified?

ME3B	PG&E (n=1)	SCE (n=4)	Planning to add more staff (n=5)
Yes	2		2
Maybe		1	1
No			
Don't know	1		1
Not applicable			
Other: "1" – SCE Contractor			

ME3C. What is their expected duration of employment? (3 months, 6 months, etc.)

ME3C	PG&E (n=1)	SCE (n=4)	Planning to add more staff (n=5)
Permanent	2		2
Depends on jobs		1	1
Don't know	1	1	2
Not applicable			

ME4. Have you or your company had to lay off any employees as a result of a lack of demand for the program

ME4	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1		1
Maybe	2		2
No		3	3
Don't know	1		1
Not applicable		1	1

ME4A. If yes, approximately how many were laid off?

ME4A	PG&E (n=1)
1 – 2	1
3 – 4	

ME5. Would you say that the number of audits you complete are increasing or decreasing?

ME5	PG&E (n=4)	SCE (n=4)	Total (n=8)
Increasing	2	3	5
Decreasing	2		2
Same		1	1

ME6. Do you have a sense that in the next three months the number of audits you complete are going to increase or decrease, if at all?

ME6	PG&E (n=4)	SCE (n=4)	Total (n=8)
Increasing	2	4	6
Decreasing	1		1
Same	1		1

ME7. How many customers that purchased EUC rebated measures probably would have purchased the measures anyway if the program hadn't existed? Would you say ALL, MANY, SOME, or NONE?

ME7	PG&E (n=4)	SCE (n=4)	Total (n=8)
All			
Some	1	2	3
Many		1	1
None	3		3
Don't know		1	1

ME8. Are customers generally installing the EUC rebated measures as part of larger retrofit or remodeling projects?

ME8	Utility
"No."	PG&E
"No, but they are often upsold from one thing, like coming to us for windows and then getting the package."	PG&E
"Yes, as part of solar."	PG&E
"No."	PG&E
"No."	SCE
"No."	SCE
"No."	SCE

ME9. Have any of your EUC projects been inspected by anyone working for the EUC program?

ME9	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	2	4
No	2	1	3
Not applicable		1	1

ME9A. If yes, what, if anything, did you learn through the inspection process?

ME9A	PG&E (n=2)	SCE (n=2)	Total (n=4)
Yes	2	1	3
No			

Other: “Paperwork” – SCE Contractor

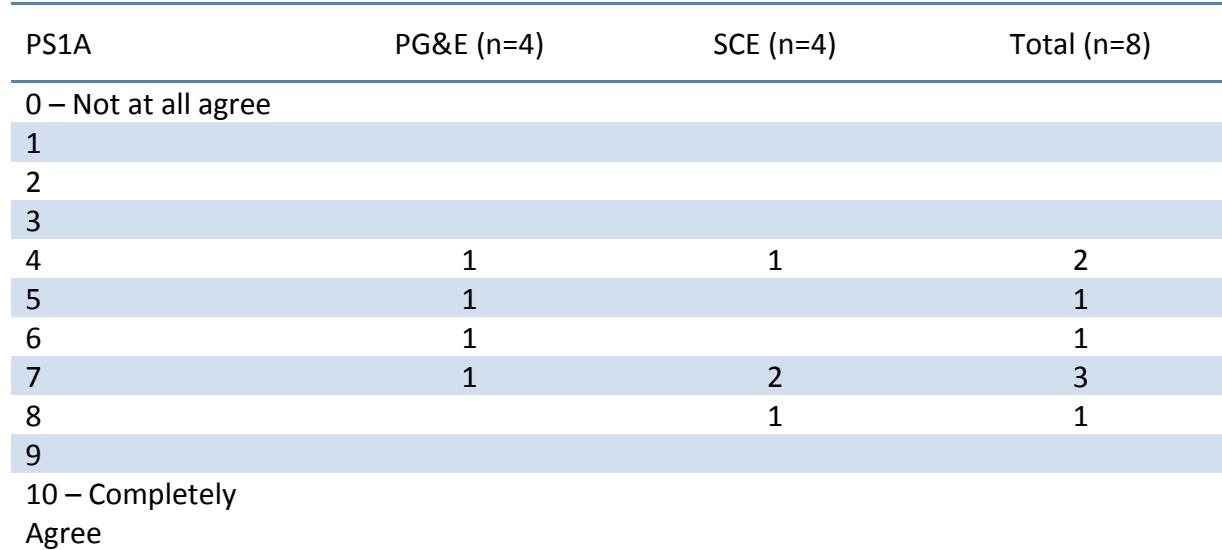
ME9B. What, if anything, have you applied or will you apply to subsequent projects that you learned about through the inspection process?

ME9B	Utility
“Practical applications of BPI standards.”	PG&E
“Duct location placement, building a dam on either side of the return. Sealing a crawlspace.”	PG&E
“Learning what they are looking for. It does give you a better understanding than the mentoring training did.”	SCE
“How to get the JRT to match the energy report.”	SCE

**Program Satisfaction**

I’m going to ask you a series of questions that are intended to determine your satisfaction with the EUC program.

PS1A. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Communications with the utilities about program requirements?



PS2A. Why do you give that rating?

PS2A	Utility
"Inconsistent program requirements."	PG&E
"You don't get a clear picture. They delay you."	SCE

PS1B. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Communications with local government about program requirements?

PS1B	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1		1	1
2		1	1
3			
4			
5	1		1
6		1	1
7			
8			
9	1		1
10 – Completely Agree		1	1
Don't know	1		1
Not applicable	1		1

PS2B. Why do you give that rating?

PS2B	Utility
"Turned back on us. Are not helpful at all."	SCE
"Seen nothing from Riverside or Oc."	SCE

PS1C. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: The paperwork requirements for the program?

PS1C	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2	1	1	2

3			
4	2	1	3
5	1	2	3
6			
7			
8			
9			
10 – Completely Agree			

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PS2C. Why do you give that rating?

PS2C	Utility
"It is intense."	PG&E
"Test-in combustion safety is extraneous for EE. A Lack of coordination between PG&E & SMUD. One-stop is better than doing everything twice."	PG&E
"There is a lot of paperwork."	SCE

PS1D. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: The Energy Pro modeling software?

PS1D	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1	1		1
2			
3		1	1
4		1	1
5	1		1
6	1		1
7		1	1
8		1	1
9	1		1
10 – Completely Agree			

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PS2D. Why do you give that rating?

PS2D	Utility

“It isn't accurate as it doesn't use real data. The reports are not user friendly.”	PG&E
“Whoever is looking at it can interpret it differently.”	SCE
“Modeling, inaccuracy HVAC.”	SCE

PS1E. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Marketing support from the local government whose jurisdiction you most often work?

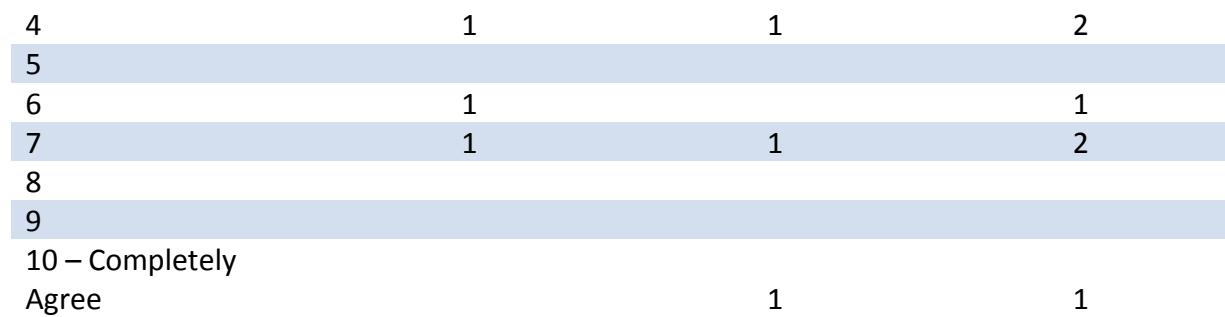
PS1E	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree	1	2	3
1			
2			
3	2		2
4			
5		1	1
6			
7			
8			
9			
10 – Completely Agree		1	1
Don't know	1		1

PS2E. Why do you give that rating?

PS2E	Utility
“Not seen any, possibly heard of one event.”	PG&E
“Won't recommend specific contractor, but no support.”	SCE
“Seen nothing from Riverside or Oc.”	SCE

PS1F. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Marketing support from the utility?

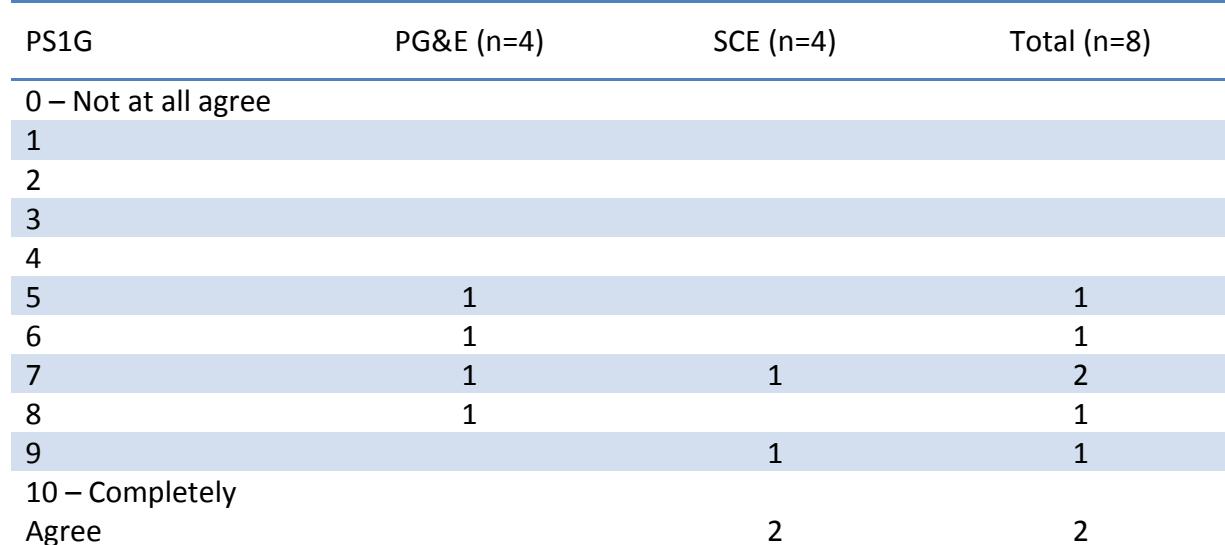
PS1F	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2			
3	1	1	2



PS2F. Why do you give that rating?

PS2F	Utility
“Some people said they got a letter, but they don't understand what is going on. I don't see the effectiveness.”	SCE
“Haven't seen much from SCE, SDG&E is great”	SCE

PS1G. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Training offered by the program?



PS2G. Why do you give that rating?

Not applicable to any respondent.

PS1H. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Program incentives?

PS1H	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2			
3			
4			
5	2	1	3
6		1	1
7			
8	2		2
9		1	1
10 – Completely Agree			
		1	1

PS2H. Why do you give that rating?

PS2H	Utility
“They need higher rebates.”	SCE

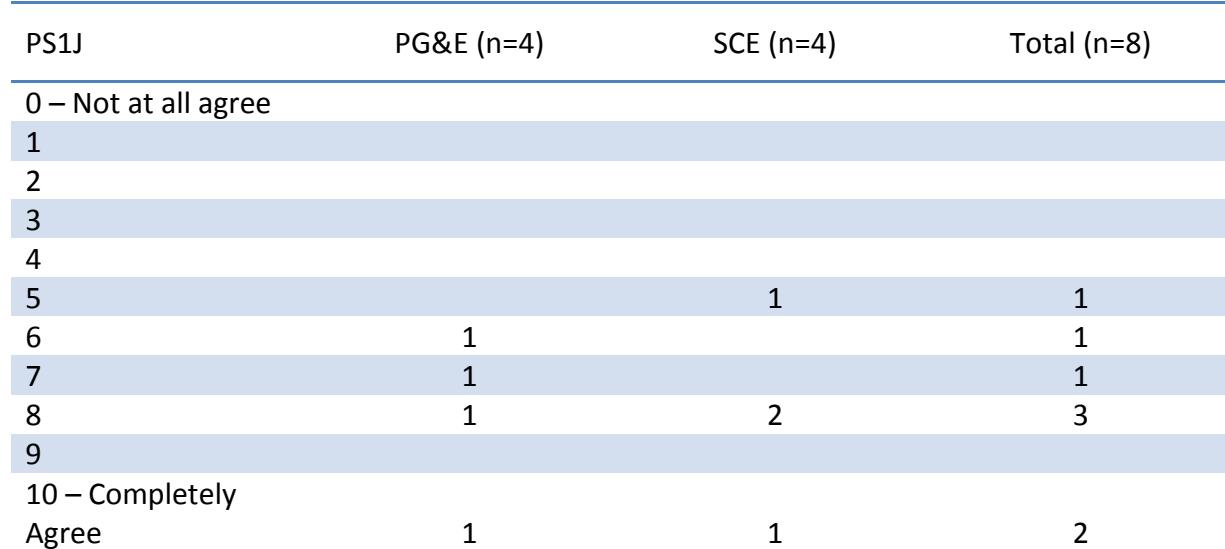
PS1I. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Additional local government incentives

PS1I	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1	1	2	3
2			
3	1		1
4			
5			
6	1		1
7			
8			
9			
10 – Completely Agree			
Don't know	1	2	2

PS2I. Why do you give that rating?

PS2I	Utility
“Not seen any.”	PG&E
“Turned back on us. Are not helpful at all.”	SCE
“Seen nothing from Riverside or Oc.”	SCE

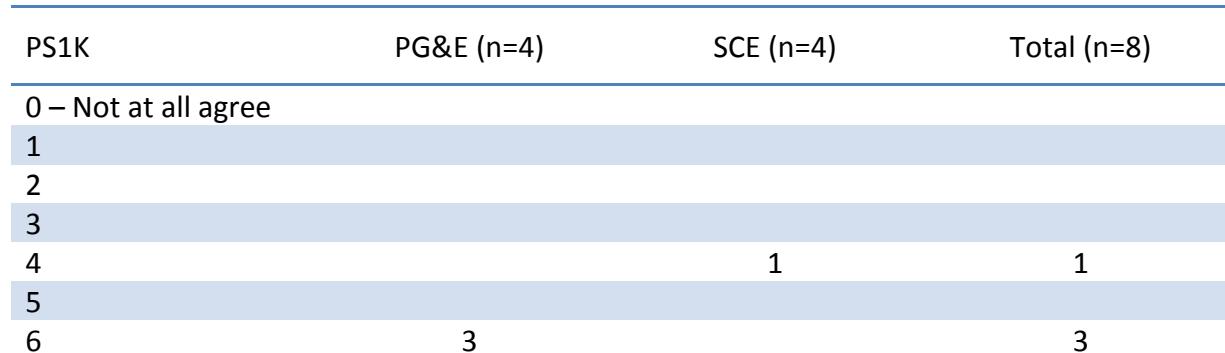
PS1J. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Program measure installation requirements



PS2J. Why do you give that rating?

Not applicable to any respondent.

PS1K. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Program overall?



7			
8	1	1	2
9		1	1
10 – Completely Agree		1	1

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PS2K. Why do you give that rating?

PS2K	Utility
“Below average.”	PG&E

PS3. What would you say are the positive features of the program overall?

PS3	Utility
“It brings awareness of WH, and increases available projects.”	PG&E
“People who want to be green, who want the job done right, and who might have enough money. They also have to be willing to wait.”	SCE
“The EUC program is a great tool. EUC is helping us earn a brand in a marketplace that we may not have done so quickly without it. EE is only one component of the motives of our client. We see people in our community becoming more aware of those things than they would have been two or three years ago.”	SCE

PS4. What would you say are the biggest problems of the program overall?

PS4	Utility
“The initial audit cost is prohibitive. Application is time consuming.”	PG&E
“Paperwork adds to the time and cost for each job.”	PG&E
“Test-in combustion safety is extraneous for EE. A Lack of coordination between PG&E & SMUD. One-stop is better than doing everything twice.”	PG&E
“The paperwork is prohibitive, takes a long time, and requires its own training. The upfront cost to the client is prohibitive. Even assessment costs are prohibitive, so I have to offer free assessments.”	SCE
“The time it takes to get this going. Some customers don't want a lot of people going in and out of their house. They just want to get the job over with.”	SCE

PS5. How do you feel about local government's involvement in the program overall?

PS5	Utility
"It is great. LA County does what they say they are going to do on time."	PG&E

PS6. How can the program make the rebate process easier/faster for you?

PS6	Utility
"CBPCA took forever to respond. BIG is better, but still very slow. There is a lot of back-and-forth that takes a lot more."	PG&E
"Email me when changes are made on Compass"	PG&E
"There are time consuming back-and-forths for trivial reasons. Real duct numbers are not allowed. Duct leakage measurement is not recorded the right way in the paperwork."	PG&E
"The cost of the contractor's materials should be paid for by financing first, so the work can start right away. Like escrow."	SCE
"Streamlined. Take less time, and easier to use."	SCE
"Reservation process takes up to 3 weeks, lot of back and forth."	SCE

## Program Design

PD1. What do you see as the strengths of the basic upgrade package of the program?

PD1	Utility
"The biggest piece is insulation. I don't do jobs that already have insulation. We have HVAC and duct sealing, which puts us in Advance."	PG&E
"Done none. Can get more out of Advanced Package w/ HVAC work"	SCE

PD2. What do you see as the weaknesses of the basic upgrade package?

PD2	Utility
"The biggest piece is insulation. I don't do jobs that already have insulation. We have HVAC and duct sealing, which puts us in Advance."	PG&E
"It is easy to move to the Advanced Package. No one wants it."	PG&E
"Basic is only half of the job. We don't do them"	PG&E
"SMUD is doing away with the Basic Package. No one qualifies for it."	PG&E
"You have to do the test and everything anyway. Go through advanced and get a	SCE

bigger rebate”	
“Doesn't fix the problem, not worth it for energy efficiency, doesn't help with Whole House No one wants it”	SCE
“Done none. Can get more out of Advanced Package w/ HVAC work”	SCE

PD3. Could the basic upgrade package be improved in any way?

PD3	Utility
“The biggest piece is insulation. I don't do jobs that already have insulation. We have HVAC and duct sealing, which puts us in Advance.”	PG&E
“It needs to do the whole job, and offer bigger rebates for it.”	PG&E
“Done none. Can get more out of Advanced Package w/ HVAC work”	SCE

PD4. What do you see as the strengths of the advanced upgrade package of the program?

PD4	Utility
“The biggest piece is insulation. I don't do jobs that already have insulation. We have HVAC and duct sealing, which puts us in Advance..”	PG&E
“Some of the measures are too low for getting rebate points. A combination of HVAC and windows doesn't come out as high in savings as one or the other by itself. Diminishing returns, but high cost.”	SCE
“Done none. Can get more out of Advanced Package w/ HVAC work”	SCE

PD5. What do you see as the weaknesses of the advanced upgrade package?

PD5	Utility
“The biggest piece is insulation. I don't do jobs that already have insulation. We have HVAC and duct sealing, which puts us in Advance..”	PG&E
“Some of the measures are too low for getting rebate points. A combination of HVAC and windows doesn't come out as high in savings as one or the other by itself. Diminishing returns, but high cost.”	SCE
“Done none. Can get more out of Advanced Package w/ HVAC work”	SCE

PD6. Could the advanced upgrade package be improved in any way?

PD6	PG&E (n=4)	SCE (n=4)	Total (n=8)
-----	------------	-----------	-------------

Yes	1	2	3
No			
Don't know	3		3
Not applicable		1	1
Other: "Done no Basic. Can get more out of Advanced Package w/ HVAC work" – SCE Contractor			

PD6A. If yes, how?

PD6A	Utility
"Include Solar"	PG&E
"Higher rebate"	SCE
"Include higher EE rates (50%, 60%)"	SCE

PD6A. Why not?

Not applicable to any respondent

PD7. Would you prefer to use software other than EnergyPro for modeling?

PD7	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	1	2
No		1	1
Don't know	3	1	4
		1	1

PD7A. If yes, what?

PD7A	Utility
"Energy Circle"	PG&E
"ReCurve"	SCE

PD7. In the future, would you be willing to float the rebate, i.e. discount the job to the customer and then have the rebate come to you?

PD7	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	2	3
Maybe	1	1	2
No	1		1
Don't know	1	1	2

PD7A. If no, why not?

PD7A	Utility
"Financial burden. Profit margin is small; subcontractors have to float it as well."	PG&E
"Don't have the money. Need to get paid right away."	PG&E

PD7B. If yes, what terms would make this arrangement acceptable to you?

PD7B	Utility
"If there were financing for it. Also, the rebate amount would have to be set from the beginning and not be subject to change."	PG&E

PD7C. If yes, please describe the impact, if any, this might have on the number of jobs you could complete.

PD7C	Utility
"Positive impact."	PG&E

### Inter Contractor Conversation

ICC1. Have you talked to other contractors outside of your company about the EUC program?

ICC1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	3	7
No			
Don't know			
Not applicable	1	1	1

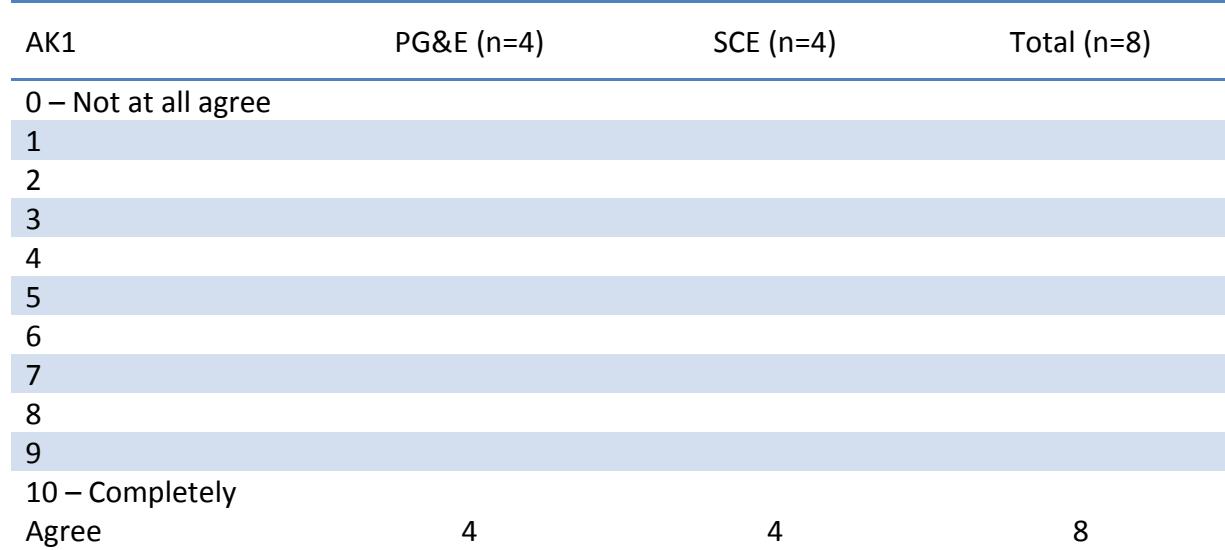
ICC1A. If yes, what is the nature of those conversations?

ICC1A	Utility
"Anecdotes. No big themes, except for a slow application process."	PG&E
"Complicated, cumbersome, and continually changing. The BLD file from the 1st assessment should be given to the customer so they can easily take that and get a quote from other contractors without them having to come in and do their own assessments."	PG&E
"Paperwork. They have to hire another person just to do the paperwork."	PG&E
"What I am saying"	SCE
"Others have asked advice about how to participate. Surprising that more people haven't come forward. Maybe it is the prohibitively expensive equipment."	SCE
"About the Paperwork"	SCE

## AKA-B

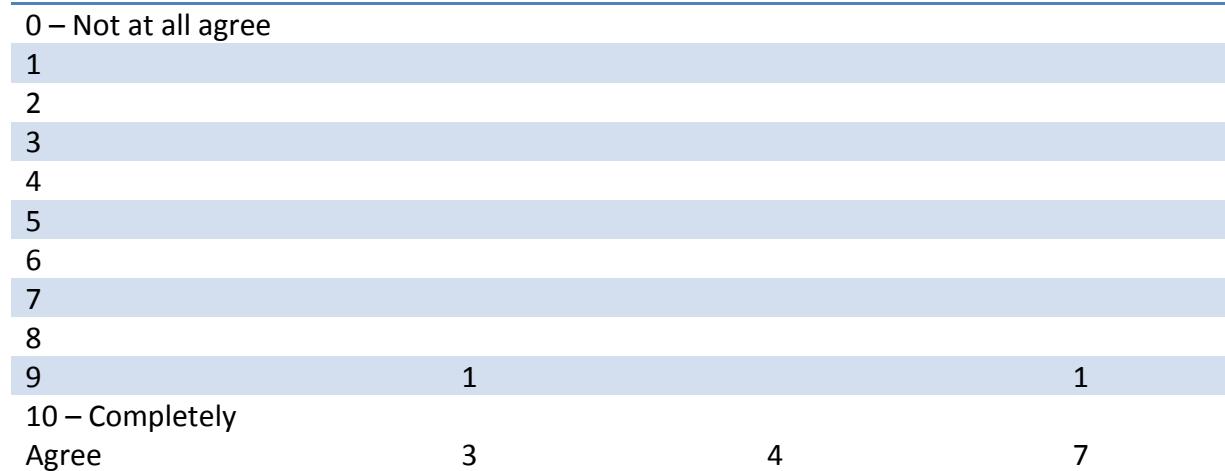
I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means Completely agree, please tell me how much you agree with each statement.

AK1. The comfort of a home that has sealing around windows and doors, insulated walls and attics, insulated hot water systems, and all high-efficiency appliances would be significantly greater than that for a home without these features.

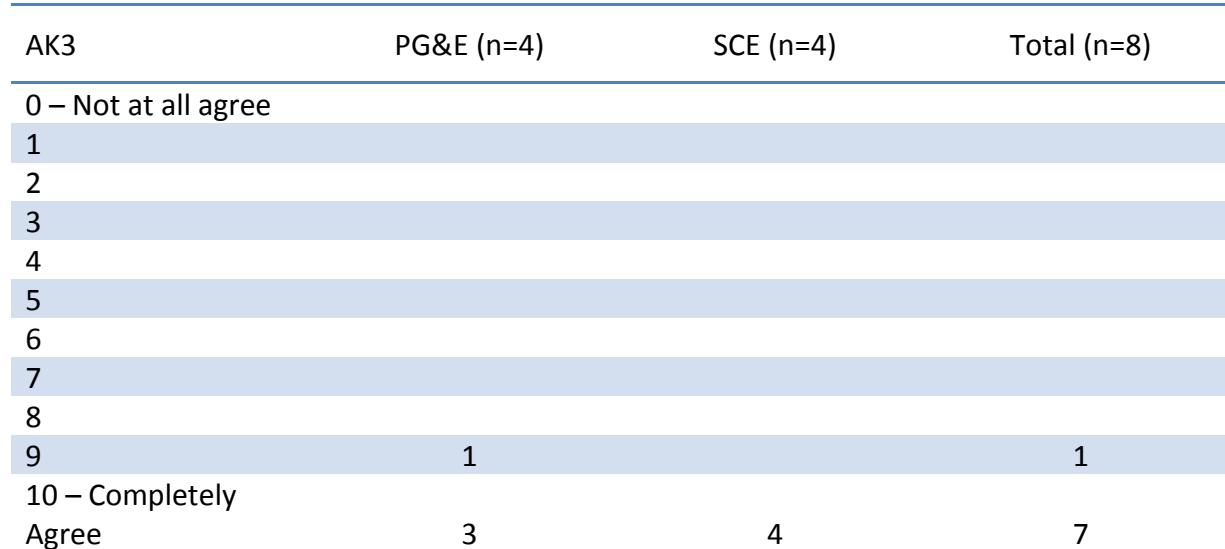


AK2. The energy costs of a home that has these features would be significantly less than one that does not.

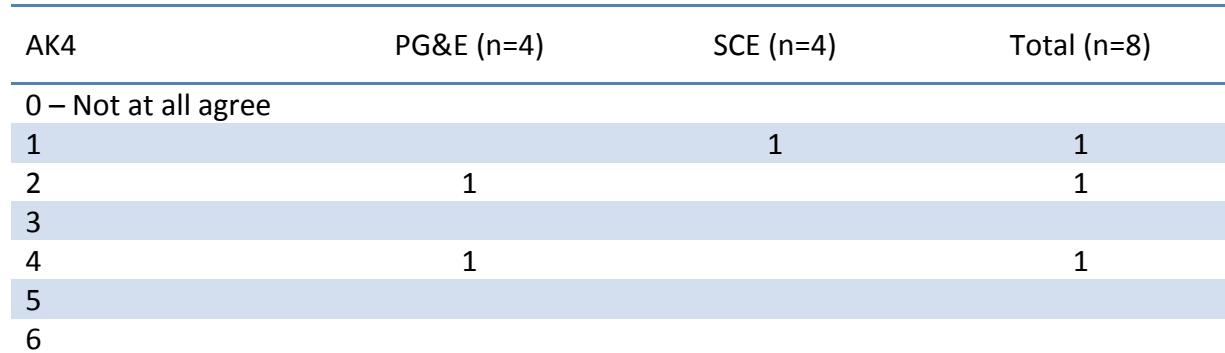
AK2	PG&E (n=4)	SCE (n=4)	Total (n=8)

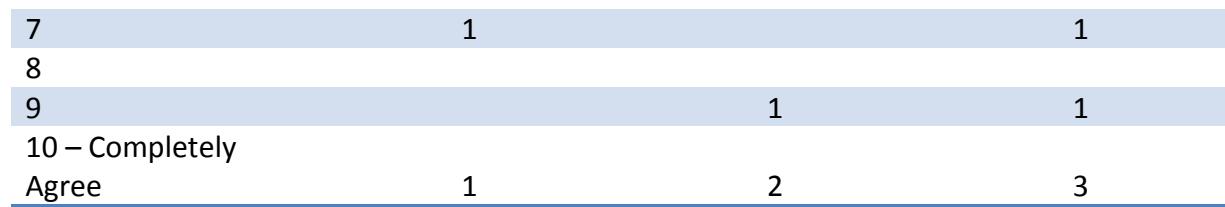


AK3. Household electricity use has an impact on the environment.

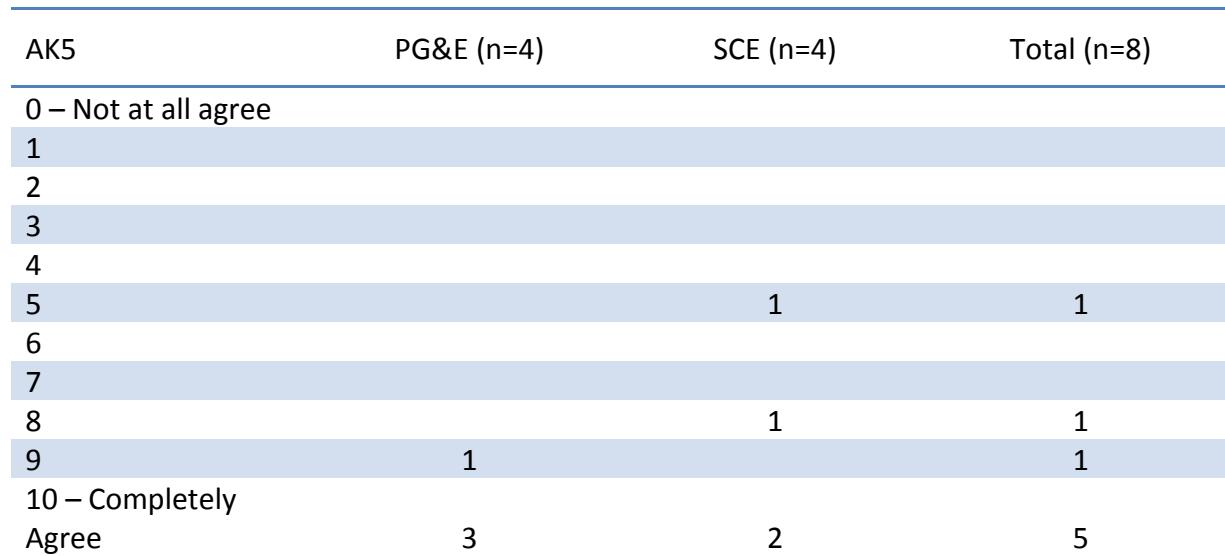


AK4. I am concerned that global climate change will increase if homeowners do not make their homes more energy efficient.

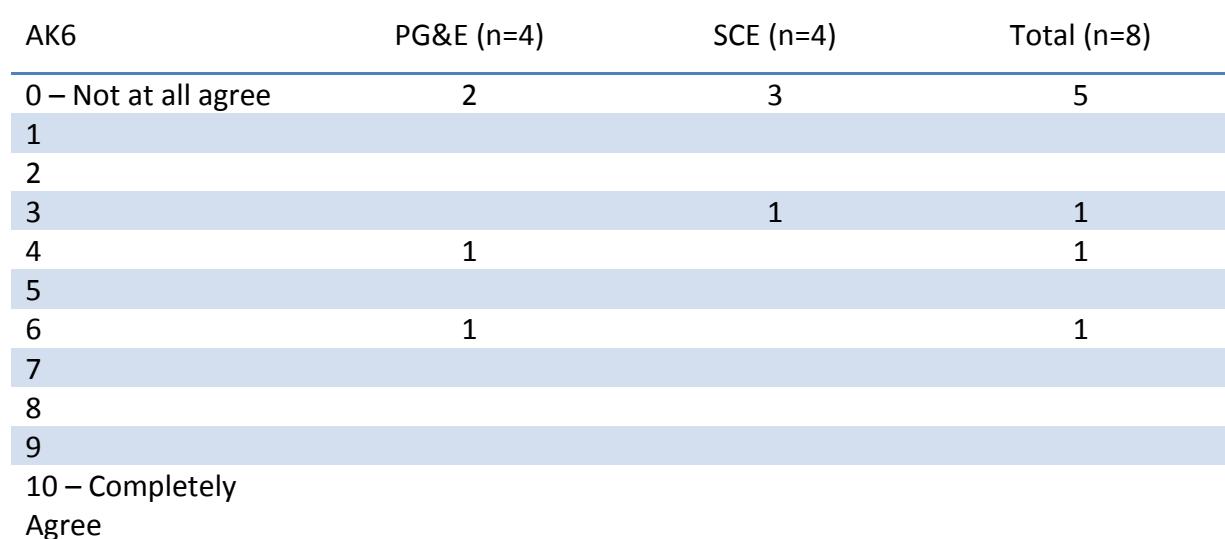




AK5. It is my responsibility to highlight the potential financial savings that can result from energy assessments and retrofits to my customers.



AK6. It is not my responsibility to help the environment by encouraging my customers to save energy.



AK7. I intend to promote energy efficiency to my customers.

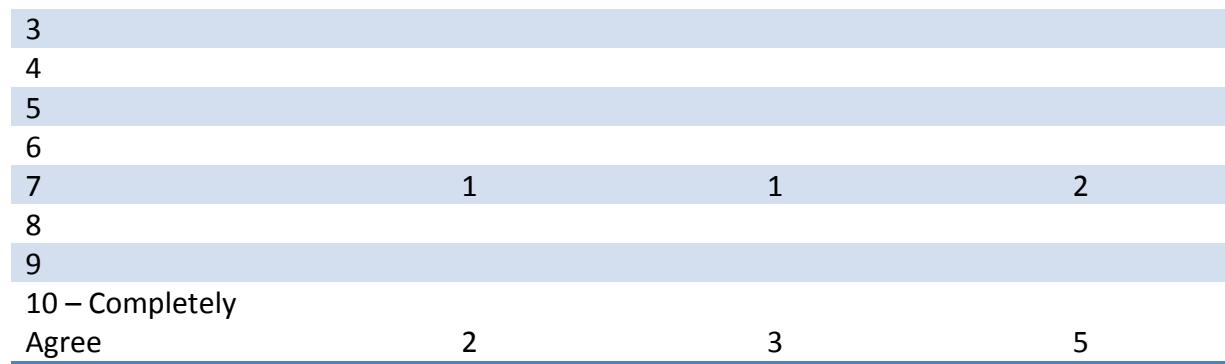
AK7	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2			
3			
4			
5			
6			
7			
8			
9	1		1
10 – Completely Agree	3	4	7

AK8. I very often encourage my customers to do a comprehensive retrofit of their homes to reduce energy use and increase comfort.

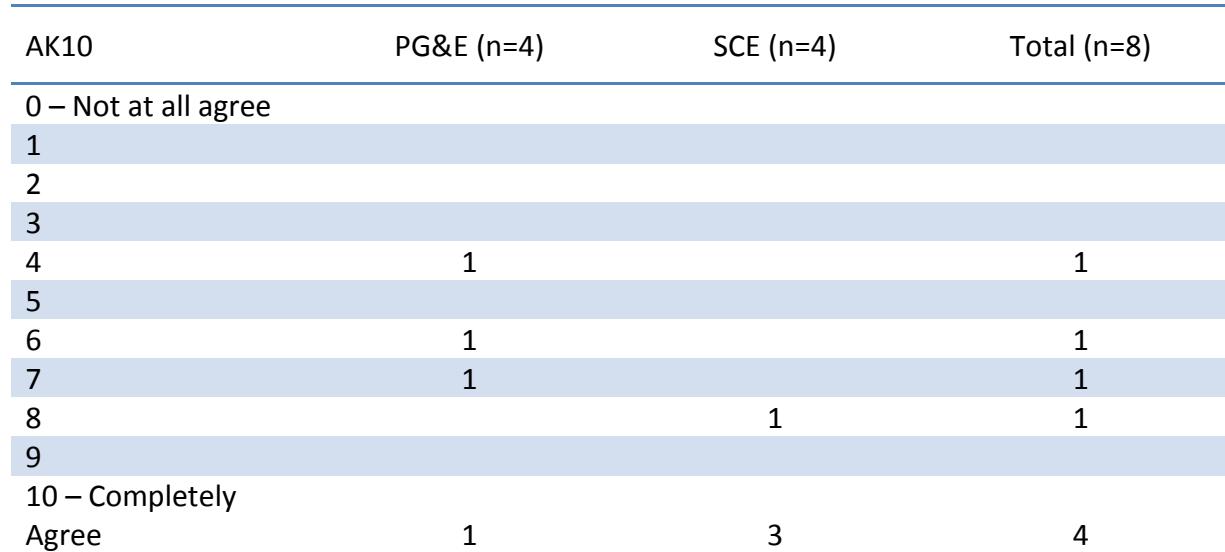
AK8	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10 – Completely Agree	4	4	8

AK9. I often worry that the cost of energy for my *own* home will increase.

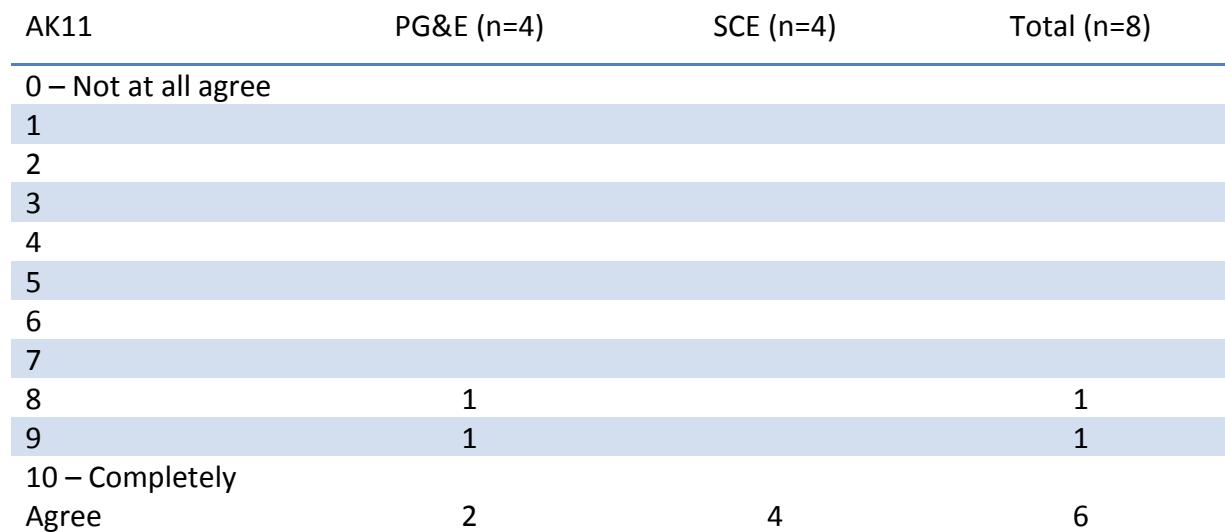
AK9	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2	1		1



AK10. I am very concerned about how energy use affects the environment.



AK11. I have to take the lead in my own household if we're going to keep our utility bills down.



AK12. It is not my responsibility to use as little energy as possible to help the environment.

AK12	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree	2	2	4
1		1	1
2			
3	1		1
4	1		1
5			
6			
7			
8			
9		1	1
10 – Completely Agree			

AK13 I intend to conserve on electricity consumption in my *own* home this summer.

AK13	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2	1		1
3			
4			
5			
6			
7			
8	1		1
9	1		1
10 – Completely Agree	1	4	5

## Closing

CL1. Those are all the questions I have. What else do you think we would want to know about your experiences with the program based on our conversation today?

CL1	Utility
-----	---------

"PG&E and SMUD should collaborate more effectively. HVAC contractors in particular are using the program to get rebates on systems they would be doing anyway. The HVAC guys say that "you need a new system and while you are at it your ducts are leaking we can fix those too." People will pay that \$10,000 anyway because they have to. I bet you will see that most of the rebates are going to customers of large HVAC companies."

PG&amp;E

#### 4.2.4. Group D: On the EUC list and has completed many projects

##### Contractor Background

C1. Can you describe the types of services you provide to customers? (Multiple answer)

C1	PG&E (n=4)	SCE (n=4)	Total (n=8)
HVAC	4	3	7
Building audits and testing	4	4	8
Windows	4	4	8
Insulation	4	3	7
Home remodeling	2	2	4
New home construction	2	2	4
Other (Specify)	3		3

C2. How many employees does your company have serving SCE territory?

C2	PG&E (n=4)	SCE (n=4)	Total (n=8)
0	4		4
1		1	1
2		1	1
3+		1	1
Other: "Yes." – SCE Contractor			

C3. How many employees does your company have serving PG&E territory?

C3	PG&E (n=4)	SCE (n=4)	Total (n=8)

0	4	4
1 – 10	2	2
11 – 20	1	1
21 – 30		
31 – 40	1	1

### BPI Certification

B1. Is your company accredited by BPI?

B1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	1	3
No	2	3	5

B1A. If no, can you tell me why it isn't?

B1A	Utility
“Dk. No time.”	PG&E
“It costs a lot of money and it isn't necessary. Certification should be enough.”	PG&E
“Not worth the extra money.”	SCE
“It seems like extortion, with no added value. It is just fluff.”	SCE
“Cost and Value.”	SCE

B1B. If yes, did you receive financial aid from an outside source to do so?

B1B	PG&E (n=2)	SCE (n=1)	BPI accredited (n=3)
Yes			
No	2	1	3

B2. How many BPI certified individuals does your company have in SCE territory?

B2	PG&E (n=4)	SCE (n=4)	Total (n=8)
0	4		4
1 – 5		3	3
6 – 10			
11 – 20	1	1	1

B3. How many BPI certified individuals does your company have in PG&E territory?

B3	PG&E (n=4)	SCE (n=4)	Total (n=8)
0		4	4
1 – 5	3		3
6 – 10	1		1

B4. What role(s) do these BPI certified personnel play relative to EUC installations and procedures? (Multiple answer)

(Showing # that said “yes” to role)	PG&E (n=4)	SCE (n=4)	Total (n=8)
Perform combustion appliance safety testing	4	4	8
Perform the EUC installations and procedures themselves	3	4	7
Teach others the appropriate procedures	4	4	8
Assure quality of others' EUC work	4	4	4
Perform test in and test out	4	4	4
Conduct energy modeling	4	3	7
Other			

B5. What is your opinion of the BPI approach? Why do you say that?

B5	Utility
“Good approach. Air sealing the attic before insulation is some”	PG&E
“It is overly cautious and cumbersome. It takes too long, and could be more streamlined. It is too strict.”	PG&E
“It is well suited for EUC. It is the best Whole House approach that I know of.”	PG&E
“Compared to other options, it is more pragmatic than say LEED for example. I also like that it concentrated on comfort and safety, and not just green.”	PG&E
“I think it is great, but it is what we know. It focuses on safety, while some of the others, like HERS, don't focus on safety as much.”	SCE
“I like it, but unfortunately the standards for the EUC program are different for some reason than the BPI standards”	SCE
“It is necessary and good that we check for safety. HERS2 is more important because it is basically about energy.”	SCE
“Good in terms of safety, but falls short of the California energy code.”	SCE

### Contractor Recruiting, Training, and Mentoring

R1. How many of your employees attended the EUC Participation Workshop?

R1	PG&E (n=4)	SCE (n=4)	Total (n=8)
0	1	1	2
1	2		2
2		3	3
3	1		1

R1A. After attending the Participation Workshop, did you feel that your organization was prepared to participate in the EUC program?

R1A	PG&E (n=3)	SCE (n=3)	Attended EUC workshop (n=6)
Yes		2	2
No		1	1
Don't know	2		2
Not applicable			
Other: "Was in pilot, so already exposed to it." – PG&E Contractor			

R1B. If no, why not?

R1B	Utility
"DK, participating since the pilot, before workshops"	PG&E
"Too busy"	PG&E
"I was one of the people approved in October when it began as a pilot. No one will be prepared because this program is such a nightmare to work in."	SCE

R2. How many of your employees attended the 3-day Basic Path training offered by [IOU]?

R2	PG&E (n=4)	SCE (n=4)	Total (n=8)
0	3	1	4
1		1	1
2		1	1
Not applicable		2	2

R2A. After attending Basic Path training, did you or your staff feel prepared to perform the tasks required for the Basic Upgrade Package?

R2A	PG&E (n=1)	SCE (n=1)	Attended 3-day Basic Path training (n=2)
Yes		1	1
No			
Don't know		1	1

R2B. If no, why not?

R2B	Utility
"DK, participating since the pilot, before workshops"	PG&E
"Too busy"	PG&E

R3. What training did your BPI certified personnel complete to help them obtain the certification?

R3	Utility
"CBPCA"	PG&E
"Everblue"	PG&E
"Some on east coast, some from Laney College in Oakland, also from Rising Sun energy, and Ecology Action."	PG&E
"EverBlue"	SCE
"One in CBPCA, one out of state"	SCE
"Everblue, also CBPCA."	SCE
"CBPCA"	SCE

R3A. Who sponsored this training?

R3A	Utility
"Ecology Action"	PG&E
"City of Phoenix paid for all of it"	SCE
"One in CBPCA, one out of state"	SCE
"LA County"	SCE
"CBPCA"	SCE

R3B. How many days of training did this involve?

R2A	PG&E (n=1)	SCE (n=1)	Attended 3-day Basic Path training (n=2)
1 week – 2 weeks	1	1	2
2 weeks – 3 weeks			
3 weeks – 4 weeks			

R3C. Did you receive a scholarship or a loan to finance the training?

R3C	PG&E (n=1)	SCE (n=1)	Attended 3-day Basic Path training (n=2)
Yes		1	1
No	1		1

R3C. What?

R3C	Utility
“From EUC”	SCE
“City of Phenix paid for all of it”	SCE
“, LA county”	SCE

R4. Have any of your staff who are not BPI certified received training that would help prepare them to implement EUC measures and procedures?

R4	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	2	5
No		1	1
Don't know			
Not applicable	1	1	2

R4A. If yes, what training did they receive?

R4A	Utility
“Air sealing.”	PG&E
“HERS1 rater, Title 24 duct testing.”	PG&E
“In House.”	PG&E
“In House.”	SCE

"In house."	SCE
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R5. What types of employees are responsible for the EnergyPro software modeling required for the program?

R4A	Utility
"Building Analyst"	PG&E
"Owner"	PG&E
"Owner"	PG&E
"Energy Auditors"	PG&E
"Energy Modelers"	SCE
"Office manager"	SCE
"Owner"	SCE
"Owner"	SCE

R6. Did anyone in your company use EnergyPro or any other home energy modeling software before participating in the program?

R6	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	3	4
No	3	1	4

R6A. If another software, which one?

R6A	Utility
"Recurve"	PG&E
"EmHome."	SCE
"RightSoft"	SCE
"Rightsoft"	SCE

R6A. Have you received instruction on how to use the EnergyPro software program?

R6A	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	4	8
No			

R6A-A. If yes, on a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the EnergyPro instruction you received?

R6A-A	Utility
"5 for basic, 6 for advanced	PG&E
"5"	PG&E
"From CBPCA, and it was a 10"	PG&E
"3"	SCE
"CalCerts did a fabulous job. The owner of Energy Pro didn't do so well."	SCE
"6"	SCE

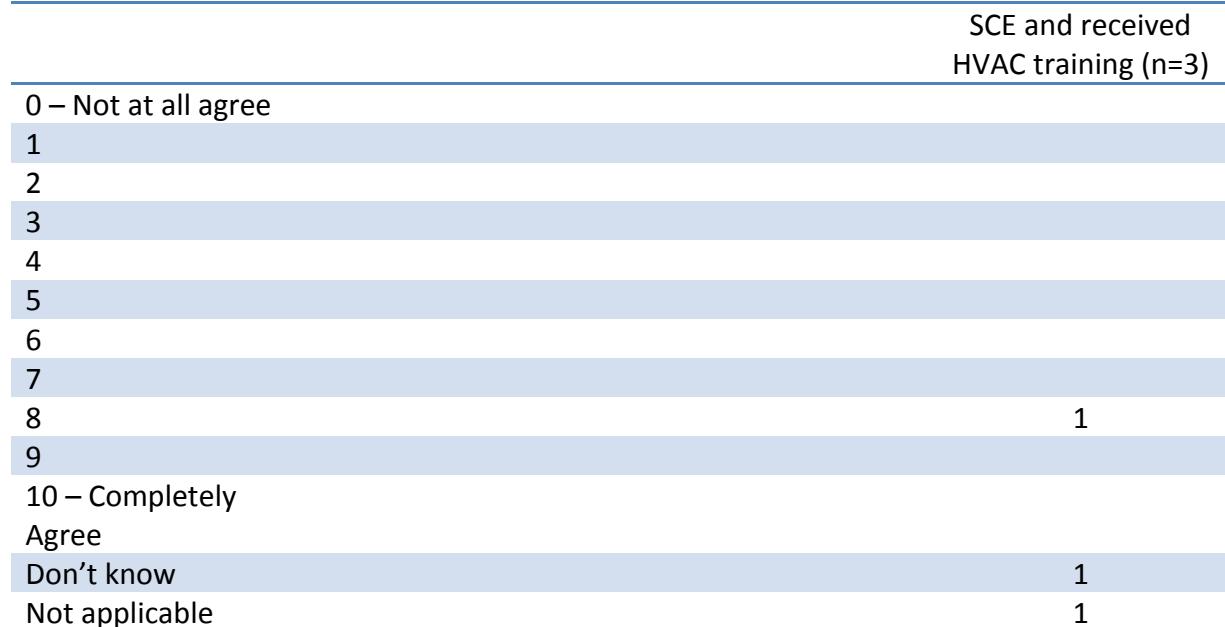
R6B. If no, why not?

Not applicable to any respondent.

R7. Did you receive training on how to size HVAC equipment based on the expected energy use and size of the home?

R7	SCE (n=4)
Yes	3
No	
No Answer	1

R7A. On a scale of 0-10 with 0 being not at all and 10 being very much, how much did you benefit from this training?



R8. Are you currently participating in SCE's Energy Star Residential HVAC Quality Installation Program (QI)?

R8	SCE (n=4)
Yes	
No	4

R9. Have you attended any training at [IOU] Energy Education Centers?

R9	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	2	4
No	1	2	3
Don't know			
Not applicable	1		1

R9A. If yes, did you complete the classroom training?

R9A	PG&E (n=2)	SCE (n=2)	IOU training (n=4)
Yes	2	2	4
No			

R9B. If yes, did you complete the field training?

R9B	PG&E (n=2)	SCE (n=2)	IOU training (n=4)
Yes	1	2	3
No	1		1

R9C If yes, have you completed your first job?

R9C	PG&E (n=2)	SCE (n=2)	IOU training (n=4)
Yes	2	2	4
No			

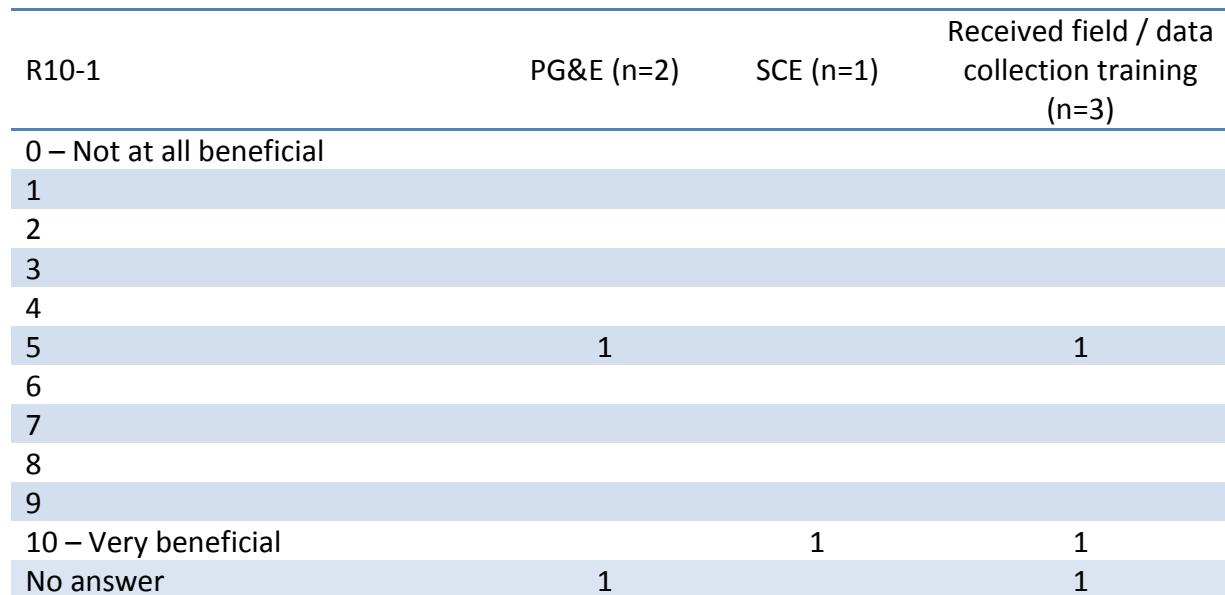
R10. Have you received any mentoring related to the EUC program?

R10	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	3	6
No		1	1
No answer	1		1

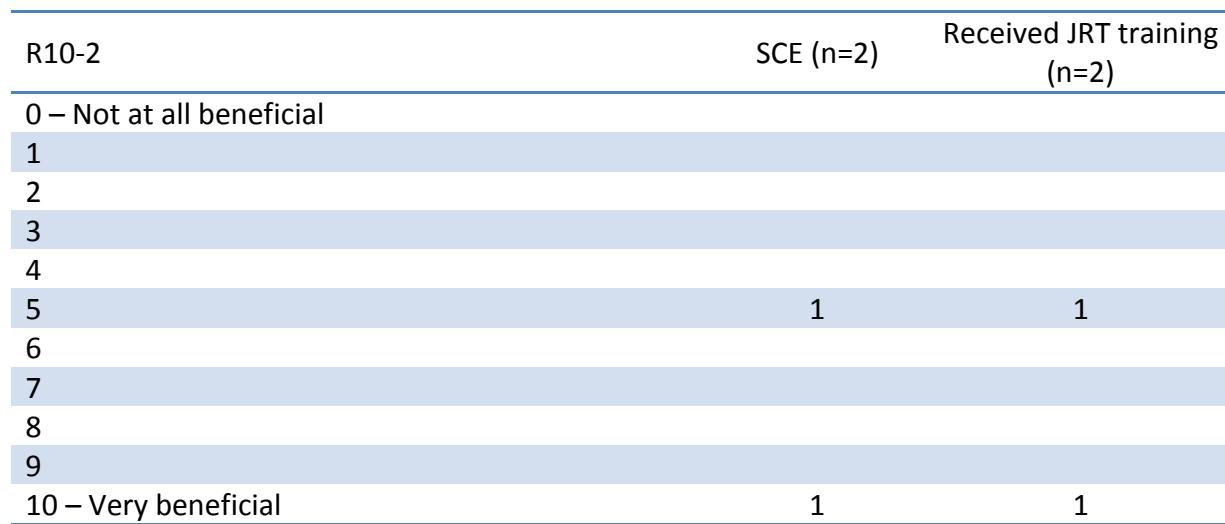
R10A. If yes, which type(s) did you receive?

(Showing # that said “yes” to program components)	PG&E (n=3)	SCE (n=4)	Total (n=7)
Field / Data Collection	2	1	3
JRT (Job Reporting Template)/ Job Processing		2	2
Energy Pro software		2	2
Mentoring received during onsite Quality Control inspection	3	1	4

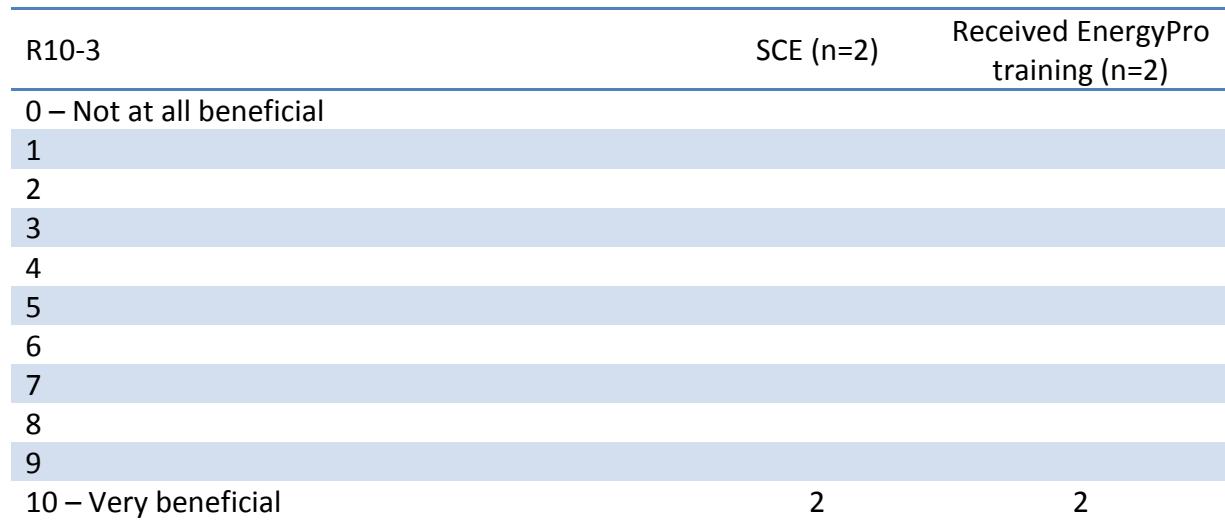
R10B-1. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the Field / Data Collection mentoring you received?



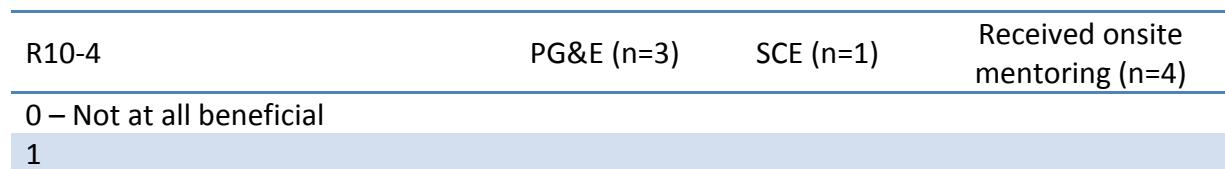
R10B-2. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the JRT (Job Reporting Template)/ Job Processing mentoring you received?



R10B-3. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the Energy Pro software mentoring you received?



R10B-4. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the mentoring received during onsite Quality Control inspection?



2		
3		
4		
5	1	1
6		
7	1	1
8		
9	1	1
10 – Very beneficial	1	1

R11. What other types of EUC-related training would benefit you or your staff?

R11	Utility
“Computer modeling classes. Anything really.”	PG&E
“Looking for more BPI certification, but it is at least a week out of work. Part time would be good.”	PG&E
“Dan Flemming is a great guy, but he is another contractor, he is not the one doing my QA/QC, that is RHA. I don’t need Dan Flemming telling me how to do a Blower Door test. I think it is almost a slap in the face to contractors who have been involved with this program from the beginning to have somebody come around and make sure we know how to work a duct blaster correctly when whatever RHA says is the law. It is patronizing. You should make all of the people doing the program management for EUC do the mentoring. You should make them shadow contractors so they can see what it is actually like. You should see if Dan Flemming should mentor the RHA auditors. I submit work and I wait 3 or weeks for someone to get back to me, but when they have an issue I have 5 days to get back to them. Half of the time RHA blew their EnergyPro model, with 2 kitchens in house with only one, or stupid things like that. Why on earth does a client need to be inconvenienced 4 or 5 times. Why on earth are we requiring showerheads in every job when people don’t even want them or want to pay for them.”	SCE
“HVAC training, Weatherization”	SCE
“EnergyPro. Overall Home Performance, not just BPI certification. More high quality training.”	SCE

R12. Do you or your company have an interest in getting training on how to best market your company and its services?

R12	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	1	2
No	3	3	6

R12A. If no, why not?

R12A	Utility
“Most of the marketing training I've seen is geared towards larger populated areas, but my area is a rural area, in which people respond to different things.”	PG&E
“We are the only contractor who is selling job; I don't think we need it.”	SCE
“We were in this program from the beginning.”	SCE
“I come from a marketing background.”	SCE

### Sub-contracting

SC1. Do you sub-contract the rebate application paperwork to another entity?

SC1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes			
No	4	4	8

SC1A. If yes, why?

Not applicable to any respondent.

SC2. Do you sub-contract any part of the BPI energy assessment out to another entity?

SC1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1		1
No	3	4	7

SC2B. Which portion of the BPI energy assessment is contracted?

SC2B	Utility
“The test-in that is required for the Valley Duct Testing EE Mortgage program, a financing partner.”	PG&E

SC2C. Is this for all jobs, advanced and basic package alike?

SC2C	Utility
“The test-in that is required for the Valley Duct Testing EE Mortgage program, a financing partner.”	PG&E

SC3. Do you sub-contract installation of any of the possible retrofit measures to another entity?

SC3	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	4	8
No			

SC3A. If yes, why?

SC3A	Utility
“Lack of expertise on our team”	PG&E
“If I were to do all of those items in house, I would need a lot of people. It works better for our business plan to subcontract.”	PG&E
“We are small.”	PG&E
“Don't have expertise on staff.”	PG&E
“We don't push those services and spend our time on other things.”	SCE
“Lack of expertise.”	SCE
“No expertise on staff.”	SCE

SC3B. Which measures are contracted out? (Multiple answer)

SC3B	PG&E (n=4)	SCE (n=4)	Total (n=8)
HVAC	2	2	4
Lighting	2		2
Painting	3		3
Windows	3	1	4
Doors	1	1	2
Roofing	3	2	5
Insulation	2	1	3
Plumbing	3	3	6
Other (Specify)		1	1

SC4. Who pulls the permits for the jobs, when needed?

SC4	PG&E (n=4)	SCE (n=4)	Total (n=8)
General	1	3	4
Specialty contractors	3	1	4

### EnergyPro

E1. Do you think EnergyPro covers the major opportunities for energy efficiency?

E1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	3	6
No	1	1	2

E1A. If not, why not?

E1A	Utility
"It is very cumbersome to use. Much of it is not used by what we are doing. It is trying to cover too many bases at once, and none of them well. I'd like to see one that is used just for the EUC program."	PG&E
"The problem is the discrepancy in the information that goes into the models. It is horrendous, and the fact that there is no feedback loop is even worse. I can have someone go out and do an inspection, then have RHA do theirs, and get an email telling me that it is ok to go forward. It takes me 24 hours to submit this to EUC, but it takes RHA 2 or 3 weeks. We start the construction after that initial email telling us to go forward, then we get an email 3 weeks later after we have already submitted the job that this job is going to fail because it is 8% savings instead of 12% savings. So now we have to go through an appeal process to justify what we did in our model. I write an appeal maybe once a week now. SO now what that means is that when a rebate is on the borderline we make the client wait for RHA's final go-ahead. The client sees that the audit has been done and says "Great, let's move forward" but we can't trust that the rebate amount expected will be there, so we just have to tell them "No, we have to wait on the model" for weeks until it is final."	SCE
"Whole House fans, pool pumps are not covered."	SCE
"Not ready for existing homes. When there are multiple types of systems in the home, it can't handle that."	SCE

E2. Do you think EnergyPro is accurate in its estimates?

E2	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes			
No	3	3	6
Don't know	1	1	2

E2A. If not, why not?

E2A	Utility
"It often says that the potential savings are more than they actually spend on electricity in total. It isn't using real numbers but estimated numbers based on an "average" home in a particular area."	PG&E
"It is the most accurate out there, but not necessarily accurate for the house."	PG&E
"Don't have reports from PG&E after the jobs are done."	PG&E
"I could sent three people on the same audit and they would get three different things. My impression is that it wasn't designed for residential buildings. The details in residential housing are problematic. It is difficult to get an accurate picture if there are more is more than one standard being used. For example, if insulate a roof with two different types of insulation, I can't record that."	PG&E
"It underestimates savings. Radiant barrier considerations are highly underestimated."	SCE
"The problem is the discrepancy in the information that goes into the models. It is horrendous, and the fact that there is no feedback loop is even worse. I can have someone go out and do an inspection, then have RHA do theirs, and get an email telling me that it is ok to go forward. It takes me 24 hours to submit this to EUC, but it takes RHA 2 or 3 weeks. We start the construction after that initial email telling us to go forward, then we get an email 3 weeks later after we have already submitted the job that this job is going to fail because it is 8% savings instead of 12% savings. So now we have to go through an appeal process to justify what we did in our model. I write an appeal maybe once a week now. SO now what that means is that when a rebate is on the borderline we make the client wait for RHA's final go-ahead. The client sees that the audit has been done and says "Great, let's move forward" but we can't trust that the rebate amount expected will be there, so we just have to tell them "No, we have to wait on the model" for weeks until it is final.'	SCE
"Not ready for existing homes. When there are multiple types of systems in the home, it can't handle that."	SCE

## E3. What do you think are the main pros and cons to using EnergyPro?

E3	Utility
"I noticed there are errors in the potential savings dollar wise. One customer was listed as having more potential savings they had actually spent on electricity."	PG&E
"It is good for what is out there. It overvalues floor insulation and undervalues attic insulation. Solar is hard to model. Cool roofs are hard to model. Limited appliance options."	PG&E
"It could be a lot easier to use. It doesn't do the simplest math right, which makes me leery of the accuracy. A lot of redundancy when entering information. It should have a "typical" template for different types of homes."	PG&E
"I could send three people on the same audit and they would get three different things. My impression is that it wasn't designed for residential buildings. The details in residential housing are problematic. It is difficult to get an accurate picture if there are more than one standard being used. For example, if insulate a roof with two different types of insulation, I can't record that."	PG&E
"It is a great tool to give a baseline reading. It is fairly accurate, but the radiant barrier piece is underrated. We have a lot of experience with that, but I know others don't."	SCE
"Once you get Energy Pro it is just a matter how which box to check. You can train a high school person to do EnergyPro right."	SCE
"It is the only thing that the CEC is allowing us to use, so I hope they have done their homework."	SCE
"Garbage in, garbage out. It take a long time to do it well, and then it doesn't handle more than one type of system."	SCE

## E4. Does your company use any other software programs to model estimated energy usage outside of the EUC program?

E4	Utility
"No"	PG&E
"No"	PG&E
"No"	PG&E
"Recurve. Generates an easy-to-understand report for the homeowner. Sometimes it is the same as EnergyPro, sometimes it is wildly different. Recurve has weekly updates."	PG&E
"No"	SCE
"No"	SCE
"Rightsoft"	SCE

**Customer Sales/Marketing**

CS1. Has your company been actively promoting the program to new or existing customers?

CS1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	3	7
No			
Not applicable		1	1

CS1A. If not, why not?

CS1A	Utility
“All I do right now are EUC jobs.”	PG&E

CS1B. If so, please describe who you have been promoting the program to.

CS1B	Utility
“Local radio.”	PG&E
“Email advertising to all old clients. Presenting at workshops. Talking to customers who call us for other things.”	PG&E
“Targeted neighborhoods. Many neighborhoods have very, very similar housing setups, and if you know the problems in one, you know about most of them.”	PG&E
“At homeowner meetings.”	SCE
“Everyone.”	SCE
“Flyers, Word of Mouth, Conversations with clients, SCE's email blasts seemed to work well.”	SCE
“Newspaper Ads, Our Website, Energy Upgrade Events, Yard Signs, Speaking at Trade Shows, speaking with clients.”	SCE

CS2. What marketing has your company done to get customers interested in a EUC retrofit?

CS1B	Utility
“We have used the SMUD home performance co-op marketing budget for radio adds.”	PG&E
“Email advertising to all old clients. Presenting at workshops. Talking to customers who call us for other things.”	PG&E

"Door hangers in targeted neighborhoods."	PG&E
"Homeowner meetings are most effective. Also use mailers and flyers."	PG&E
"Door-to-door."	SCE
"Flyers, Word of Mouth, Conversations with clients, SCE's email blasts seemed to work well."	SCE
"Newspaper Ads, Our Website, Energy Upgrade Events, Yard Signs, Speaking at Trade Shows, speaking with clients."	SCE

CS3. What sales tools do you use to present information to prospective customers?

CS3	Utility
"The in-person audit. People have usually heard about it before they contact us. We do very little selling of the program."	PG&E
"Conversation. Rebate for assessment work through Ecology Action in Mendicino, and Sonoma County Energy Independence Program.	PG&E
"No. Conversation."	PG&E
"Audit report. Pointing out issues in the house."	PG&E
"Conversation. EUC door hangers.	SCE
"Flyers, Word of Mouth, Conversations with clients, SCE's email blasts seemed ot work well"	SCE
"Conversation"	SCE

CS4. What types of messages seem to motivate customers to get the work done? Is there a combination of messages that is especially effective?

CS4	Utility
"Saving money. It is often an upsell from someone calling us about replacing their HVAC. Audits are paid for by SMUD, so we tell them to take advantage of the rebates when available. However, most people just want an HVAC, and we like quick jobs."	PG&E
"The assessment is a very useful tool to show savings and explain the rebate. Saving son energy bills"	PG&E
"The computer modeling starts to lose them, it is hard to understand. The program in general is hard to understand. Get the rebates while you can. Immediate comfort difference.	PG&E
"Comfort is the lead thing. Safety sells well as well, when available."	PG&E
"Additional rebates from LA County. The rebates are so huge."	SCE
"Saving Money, avoid telling them how long it take to get the rebate. Being green is also very important"	SCE
"Comfort and take advantage of the rebate. The rebate is necessary, but comfort	SCE

motivates them.”

CS5. Have you used other programs in combination with EUC to help sell the job?

CS5	Utility
“The SMUD audit rebate.”	PG&E
“PG&E, Eukia, and Healdsburg rebate programs. CHF loan program was tremendously helpful. Rebate for assessment work through Ecology Action in Mendicino, and Sonoma County Energy Independence Program.”	PG&E
“Santa Clara Home Improvement program subsidized test-in and test out.”	PG&E
“CHF financing. Local rebate programs.”	PG&E
“LA County programs.”	SCE
“CEC HERS2 \$300 test-in, \$200 test-out rebate. LA county rebates”	SCE
“HERS rebate from California energy commission.”	SCE

CS5. What do you think are the best ways to engage customers about participating in the program?

CS5	Utility
“The in-person audit. It is often an upsell from someone calling us about replacing their HVAC. Audits are paid for by SMUD, so we tell them to take advantage of the rebates when available. However, most people just want an HVAC, and we like quick jobs.”	PG&E
“Conversation. Rebate for assessment work through Ecology Action in Mendicino, and Sonoma County Energy Independence Program.”	PG&E
“The computer modeling starts to lose them, it is hard to understand. The program in general is hard to understand. Get the rebates while you can. Immediate comfort difference.”	PG&E
“Take them around the house and demonstrate the issues. Talk to them in person at home shows.	PG&E
“Conversation. We go door-to-door.	SCE
“Saving Money, avoid telling them how long it takes to get the rebate. Being green is also very important”	SCE
“Comfort and take advantage of the rebate. The rebate is necessary, but comfort motivates them.”	SCE

CS6. Have any customers come to you inquiring about the program?

CS6	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	4	3	7
No			
Don't know		1	1

CS6A. Where do your customers typically hear about the program?

CS6A	Utility
"EUC website. SMUD advertising. Contractors do advertising too."	PG&E
"Presentations, some by Redi or Ecology Action."	PG&E
"Advertising that Santa Clara County has done, and through the Santa Clara County Website. Also government websites."	PG&E
"Word of mouth. LE flyers to new homeowners. Look for us for specific measures, then see this opportunity on our website	PG&E
"EUC website, but they go there from some other advertising from somewhere else."	SCE
"Open house demonstration, email blasts from SCE, Bill inserts"	SCE
"EUC Website."	SCE

CS7. In your opinion, what types of advertising or marketing are the most effective in generating customer interest in EUC?

CS7	Utility
"Presentations, some by Redi or Ecology Action."	PG&E
"Govt. Websites."	PG&E
"Homeowners meetings and word of mouth."	PG&E
"Door to door."	SCE
"SCE's email blasts seem to be effective."	SCE
"Talking with people at events, and the EUC website."	SCE

CS8. About what percentage of your leads come from the EUC website, and about what percentage from other sources (referrals, local advertising, etc)?

CS8	Utility

“10%”	PG&E
“50%”	PG&E
“Most”	SCE
“Customers who call from the EUC website are very confused, and need explanation.”	SCE
“80%”	SCE

CS8. On average, about how many customers do you contact before you are able to complete one energy assessment?

CS8	Utility
“3”	PG&E
“40942”	PG&E
“90%”	PG&E
“1”	SCE
“50%”	SCE

CS4. Would audit subsidies help close a retrofit sale?

CS4	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	3	6
No	1		1
Not applicable		1	1

CS4A. If yes, why?

CS8	Utility
“They have worked through Ecology Action, or Sonoma County”	PG&E
“Santa Clara audit rebates have already helped me .”	PG&E
“The cost of an audit identifies people who are serious about retrofit work, instead of people who just want to know more about their home.	PG&E
“Less money out of pocket. That worked in the AZ program. The utilities subsidized 100% of audits. All of us collectively are doing about 1000 audits per month (i.e. him and other companies.)”	SCE
“Yes, CEC HERS2 already does that.”	SCE
“The HERS incentives have given me more business. A rebate is good, cause they have to put money out.”	SCE

CS9. On average, about how many customers do you contact before you are able to complete one retrofit?

CS9	Utility
“8”	PG&E
“64%”	PG&E
“1”	SCE
“2 or 3”	SCE

CS10. On average, how many days pass from your first contact with the customer and completion of the retrofit?

CS8	Utility
“7-10 days”	PG&E
“30”	PG&E
“5 weeks”	PG&E
“Several Months right now, but usually 3-4 weeks.”	SCE
“3-4 weeks”	SCE
“2 months”	SCE
“1-6 months, it varies widely”	SCE

CS10A. How about from first contact to completing the energy assessment?

CS10A	PG&E (n=4)	SCE (n=4)	Total (n=8)
1 day – 3 days	1	1	2
4 days – 1 week	2		2
1 week – 2 weeks		2	2
2 weeks or more	1		1
Not applicable		1	1

CS10B. Following an assessment, what is the average number of days you spend in the customer’s home to complete installation work

CS10B	PG&E (n=4)	SCE (n=4)	Total (n=8)

3 – 4 days	2	2
4 – 5 days	2	2
5 days – 1 week	1	1
1 week – 2 weeks	1	1
2 weeks or more	1	1
Not applicable	1	1

### Customer Participation Barriers & Drivers

CB1. What do you think keeps customers from participating in the program?

CB1	Utility
“The money upfront”	PG&E
“Almost always a lack of funding.”	PG&E
“People shopping around for contractors.”	PG&E
“Too costly. We do big projects, so it can be sticker shock.”	PG&E
“Can't finance the package.”	SCE
“HVAC subcontractors are very expensive.”	SCE
“Sufficient customer budget.”	SCE

CB2. What do you think keeps customers from participating in getting retrofit work done after the energy assessment?

CB2	Utility
“Money upfront and failed financing”	PG&E
“Almost always a lack of funding.”	PG&E
“Upfront cost, some people can't afford it.”	PG&E
“Too costly. We do big projects, so it can be sticker shock.”	PG&E
“Can't finance the package.”	SCE
“Rebate isn't enough to convince them. Or they just want ot go solar instead, they don't have to worry about energy efficiency.”	SCE
“Sufficient customer budget.”	SCE

CB3. Do you have any ideas as to how the program can get these customers to move forward?

CB3	Utility
“More rebates and financing.”	PG&E
“A loan program similar to CHF. Financing for lower income areas, higher rebates for higher income areas.”	PG&E
“Comfort, safety, savings.”	PG&E
“Financing”	SCE
“Higher rebates, educate the public. Maybe a 30 minute infomercial on home-improvement shows.”	SCE

CB4. What do you think motivates customers to participate in the program?

CB4	Utility
“Rebates. Upselling from HVAC. Taking advantage of an opportunity.”	PG&E
“High energy bills”	PG&E
“Rebate opportunity and comfort. For me, it is because they want a local contractor, and I was referred to them. My average price is pretty low for the work that we are doing.”	PG&E
“Comfort, safety, savings.”	PG&E
“Rebates are large. Comfort levels, and safety (taking care of asbestos issues). Then energy cost savings.”	SCE
“People can't show off their new ductwork like they can show off their marble counters”	SCE
“Comfort and efficiency, rebates.”	SCE

CB5. We understand that these projects are typically expensive for a customer. How do you think program-based financing could best be structured to make customers more likely to proceed with the job after an assessment?

CB5	Utility
“Use something that is already in place, like GE or something that contractors are already familiar with. CHF took too long. You could also add the payments to property taxes.”	PG&E
“CHF was great, easy to work with. The only drawback was the requirement that buildings over 35 years old, you had to go through a historic preservation review for many measures.”	PG&E
“CHF was good, but it makes it difficult because we have to float the rebate and it takes a long time. The paperwork was long, which is also bad. An ideal program would be faster, and we wouldn't have to wait to get paid. No money down for customers is fantastic.”	PG&E

“Financing company would be willing to accept the rebate as part of the payment. Say it was a \$10,000 job with \$8,000 of rebates. Pay the contractor directly and immediately, and then the financer takes the \$8,000 rebate and gets the rest from the homeowner. That way a homeowner can qualify for a \$2000 loan instead of a \$10,000, and we get paid faster.”

SCE

“LA County 2% financing is working. PACE was great; I bet everyone would do that.”

SCE

“LA county has a 2% loan, and I would love to offer that to everyone. Energy Efficient Mortgage.”

SCE

SCE

SCE

#### CB5A. Who would receive the financing? Contractor or customer?

CB5	Utility
“Either one”	PG&E
“Contractor”	PG&E
“Contractor”	PG&E
“Contractor or Financer. See CB5.”	SCE
“Should go through the customer or SCE.”	SCE

#### CB5B. What would be the terms?

CB5B	Utility
“Use something that is already in place, like GE or something that contractors are already familiar with. CHF took too long. You could also add the payments to property taxes.”	PG&E
“CHF was great, easy to work with. The only drawback was the requirement that buildings over 35 years old, you had to go through a historic preservation review for many measures.”	PG&E
“CHF 15% 30 year loan seemed to work.”	PG&E
“Generous, see CB5.”	SCE
“LA County 2% financing is working. PACE was great, I bet everyone would do that.”	SCE

#### Conversion Rates

#### CR1. How many energy assessments have you done as part of the program so far?

CR1	PG&E (n=4)	SCE (n=4)	Total (n=8)
20 – 30		1	1
31 – 40		1	1
41 – 50	1		1
51 – 60			
61 – 70			
71 – 80			
81 – 90	2		2
91 – 100 +	1	1	2
Not applicable		1	1

CR2. What percentage of these customers could qualify for program rebates if they installed the recommended measures?

CR2	PG&E (n=4)	SCE (n=4)	Total (n=8)
20% – 40%		1	1
41% – 60%	1		1
61% – 80%	2	1	3
81% – 90% +	1	1	2
Not applicable		1	1

CR3. Among those that would save enough to qualify, what percentage decided not to move forward with the retrofit?

CR3	PG&E (n=4)	SCE (n=4)	Total (n=8)
10% – 30%	1	3	4
31% – 50%	1		1
51% – 70%	1		1
Don't know	1		1
Not applicable		1	1

CR4. What do you think are the top three reasons customers decide not to move forward from the energy assessment to a retrofit?

CR4	Utility
“Money and financing”	PG&E
“Lack of funding.”	PG&E
“Not enough money, going with other contractors.”	PG&E
“Sticker shock, inflexibility of it: who can do the work and the timeline. Some suspicion about having PG&E come in and inspect the work...that gets into a feeling of bad government programs.”	PG&E
“Rebate isn't enough to convince them. Or they just want to go solar instead, they don't have to worry about energy efficiency.”	SCE
“Lack of budget”	SCE

CR5. Approximately what percentage of energy assessments or audits turn into retrofits?

CR5	PG&E (n=4)	SCE (n=4)	Total (n=8)
40% – 50%	1	1	2
51% – 60%			
61% – 70%	1		1
71% – 80%			
81% – 90%		2	2
Don't know	2		2
Not applicable		1	1

CR5. Do you offer a free in-home walk-through, or try to get the homeowner to commit to the assessment at a cost?

CR5	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3		3
No		3	3
Don't know	1		1
Not applicable		1	1

CR6. In the last 12 months, would you say that the number of energy assessments turning into retrofits is increasing, decreasing, or staying the same?

	PG&E (n=4)	SCE (n=4)	Total (n=8)

Increasing	3	3	6
Decreasing			
Staying the same			
Don't know	1		1
Not applicable		1	1

CR7. Why do you say that?

CR7	Utility
"CHF loan program."	PG&E
"Rebates. Santa Clara rebates."	PG&E
"Local incentives are pushing it up"	PG&E
"We have been ramping up."	SCE
"This year alone (2012), I've done 8 assessments in 2 months, and on my third job.	SCE
"Word is getting out. HERs rebate, and I am one of 4 contractors that are certified to do that."	SCE

CB4. About what percentage of assessments don't go forward due to lack of financing. About how many jobs does this represent?

CB4	Utility
"80%"	PG&E
"Many, DK"	PG&E
"20%. 40"	SCE
"0%"	SCE
"Most"	SCE

CB5. How do you think program-based financing would best be structured to help move assessments into retrofits?

CB5	Utility
"Use something that is already in place, like GE or something that contractors are already familiar with. CHF took too long. You could also add the payments to property taxes."	PG&E
"CHF was great, easy to work with. The only drawback was the requirement that buildings over 35 years old, you had to go through a historic preservation review for many measures."	PG&E
"No money down, but simple. Little paperwork, an fast payout."	PG&E

“20%. 40”	SCE
“LA County 2% financing is working. PACE was great, I bet everyone would do that.”	SCE
“LA county has a 2% loan, and I would love to offer that to everyone. Energy Efficient Mortgage.”	SCE

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CB5A. Who would receive the financing? Contractor or customer?

CB5A	Utility
“Either one”	PG&E
“CHF was great, easy to work with. The only drawback was the requirement that buildings over 35 years old, you had to go through a historic preservation review for many measures.”	PG&E
“Contractor”	PG&E
“Should go through the customer or SCE.”	SCE
“Customer.”	SCE

CB5B. What would be the terms?

CB5B	Utility
“Use something that is already in place, like GE or something that contractors are already familiar with. CHF took too long. You could also add the payments to property taxes.”	PG&E
“CHF was great, easy to work with. The only drawback was the requirement that buildings over 35 years old, you had to go through a historic preservation review for many measures.”	PG&E
“15% 30 year like CHF should be good.”	PG&E
“Generous. PACE or 2%”	SCE
“LA county has a 2% loan, and I would love to offer that to everyone. Energy Efficient Mortgage.”	SCE

PA8. Are you aware of Los Angeles County’s participation in the Energy Upgrade program?

PA8	SCE (n=4)
Yes	3
No	
Not applicable	1

PA8. Were you aware of the following LA County EUC program components before this call?

(Showing # that said “yes” to program components)	SCE and aware of LA County’s participation in the EUC program (n=4)
Additional incentives of \$1000-\$4000 on top of the utility incentives	3
Scholarships to reimburse you for training certifications	3
2% financing for homeowner energy upgrades	3
Regular program updates such as e-blasts and newsletters	3
TV, radio, and print ads drumming up homeowner demand	3

PA9. Have you heard of the “flex path”?

PA9	SCE (n=4)
Yes	3
No	
Not applicable	1

PA9-1. What do you know about it? How does it compare to the basic and advanced packages?

PA9-1	Utility
“You can pick individual measures that are outside of the program for direct rebates for La County. It isn’t a useful tool for us, but it could be for others.”	PG&E
“I’ve tried to get two people in, and one minor thing disqualified them. They needed attic insulation, and one needed duct sealing. It would have been easier and given them more money than the Basic package, but their duct were not already insulated sufficiently, so they were disqualified.”	PG&E
“I’m very familiar with it, and I think LA County fell short. The improvement list includes tankless water heaters, but not high-efficiency tank heaters. It is probably better to just go with an advanced upgrade. It is easier to manipulate the program. Contractors can easily abuse it.”	PG&E

## Contractor Participation

CP1. Is there anything that [IOU] could do to help you asses more homes through the program?

CP1	Utility
"SMUD subsidies for audits."	PG&E
"Continue rebate offers for assessments."	PG&E
"Test-in Test-out subsidy really kick started the program in Santa Clara. Advertising is helpful. Building permit process has slowed down my process. Most cities have an over-the-counter fast permit process."	PG&E
"Making our requirements very clear. Lingering issues delay jobs. Consistency is very important, because changing requirements part way through causes delays. A more unified marketing message would be better. People who think it is free money don't do retrofits. People are suspicious of giant bureaucracy, and feel like they might not see the rebates. We have to re-assure them that they will get it in a timely manner. More homeowner meetings for marketing."	PG&E
"Process faster"	SCE
"Shorten the rebate process. Example: We did a job over the summer. They said they got our JRT on August 25th, but it was most likely in before them and took a while to get into their system. They did a QC inspection at the end of August and we went ahead. They didn't get around to doing a QA on the job until November, and a QC inspection in January, and we just got a notice that this job is going to be re-rated because it doesn't meet minimum requirements and we need to do an appeal. We just got [in February] that notice for a job in August. This client was someone who absolutely loved the program and wanted to recommend it to people. Now the client hates the program and hates us. We had somebody who invited us to do a participation workshop and asked us to bring one of our clients to talk to prospective clients. I didn't know which client to bring, even though we are in the top 4 or 5 contractors for this program."	SCE
"Process the rebates faster...then I can do more jobs."	SCE
"E-blasts, bill inserts. SoCal Gas does this, and I get more phone calls."	SCE

CP2. Have you conducted a qualifying retrofit without filing for the EUC rebate?

	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes		1	1
No	4	2	6
Don't know			
Not applicable		1	1
Other: "Yes. It takes 4 times to take off work, and it is going to take months to get the ok, then			

months to get the rebate, some people don't want to deal with that, even with the rebate."

CP3. Do you know of any financing sources for customers?

CP3	Utility
"Yes, EE mortgages, GE, SMUD financing"	PG&E
"EGIA"	PG&E
"LA County. GE, Enerbate, SCS, Time Payment corp."	SCE
"LA County 2%. EEM"	SCE
"LA County financing. EGIA EE mortgages."	SCE

CP3A. If yes, do you refer customers directly to those financing sources?

CP3A	PG&E (n=1)	SCE (n=3)	Knows financing sources (n=4)
Yes	1	2	3
No		1	1

CP3B. If yes, do you think this helps to sell the program?

CP3B	PG&E (n=1)	SCE (n=3)	Knows financing sources (n=4)
Yes	1	3	4
No			

CP4. About how long does it take to receive final payment from the customer for a job after it is completed?

CP4	Utility
"If there is no financing, they are paid on completion. If it is through GE it takes a few days, if it is through SMUD it takes a week or so."	PG&E
"Immediate"	PG&E
"Immediately"	PG&E
"Immediately"	PG&E

"Within 48 hours."	SCE
"6 months"	SCE
"1 week"	SCE

CP5. Do you currently float the rebate?

CP5	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes			
No	4	3	7
Not applicable		1	1

CP5A. If yes, do you think this is helpful in recruiting customers to the program?

Not applicable to any respondent.

CP5B. If no, would you do this if you had financing to help with it?

CP5B	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	2	5
No	1	1	2
Not applicable		1	1

CP5C. Would you be interested receiving this kind of loan from [IOU]?

CP5C	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	2	5
No	1	1	2
Not applicable		1	1
Other: "Yes, if there were same-as-cash financing" – PG&E contractor			

CP5D. Do you think it would help with recruiting customers to be able to float the rebate (with financing)?

CP5D	PG&E (n=4)	SCE (n=4)	Total (n=8)

Yes	2	1	3
No	1	1	2
Don't know	1		1
Not applicable		1	1
Other: "Maybe, but it is too much risk for a smaller company." – SCE contractor			

CP6. According to our records, your organization has completed a higher-than-average number of EUC Projects compared to other participating contractors. Why do you think that this is the case?

CP6	Utility
"Other companies are not very organized. New contractors started in Home Performance yesterday and don't have the education, but HVAC already has a lot of the BPI procedures built in. General contractors who were out of work are starting up again and have to learn how to run a business in addition to learning about EUC."	PG&E
"CHF has really helped. It is also the only game in town up here, there are not other rebate programs.	PG&E
"I have an efficient process that it specifically built around the EUC rebates. I am also priced very competitively."	PG&E
"We started in the pilot program, so we have been participating longer. We merged with another large company who was also doing audits, so we got larger. Focused our marketing towards that...we are the first that pops up in our area. It is almost all of our business."	PG&E
"Our marketing is the reason. Direct door to door conversations. EUC related jobs are all we do. We aren't adding this on to something else. We are large and operate in multiple states, in many different rebate programs. Our direct door to door marketing."	SCE
"Most contractors out there sell against the program. It is a lead generation service, they tell people how awful the program is and say "let me give you a good price". I hear it all the time."	SCE
"I'm a good sales person. Clients are looking for being more comfortable and helping the environment."	SCE
"Our experience. I often come in after other contractors have come in and find big missed opportunities. We have been doing this since before rebates were available. It is hard for new contractors who don't know the trade as well, and don't have all of the equipment already."	SCE

## Market Effects

ME1. Did you learn any new job skills from the program?

ME1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	3	6
No			
Not applicable		1	1
Not answer	1		1

ME1A. If yes, what skills did you learn?

ME1A	Utility
"A general contractor's license, also BPI certification."	PG&E
"Combustion safety Testing."	PG&E
"Energy Audits"	PG&E
"Everything. That's all we do. BPI certification. Air sealing. Duct sealing."	SCE
"Energy auditing."	SCE
"Energy Pro"	SCE

ME2. Did you or your company hire additional employees as a result of the program?

ME2	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	3	1	4
No	1	1	2
Not applicable		1	1
Other: "Sufficient customer budget."			

ME2A. If yes, approximately how many new employees were hired?

ME2A	PG&E (n=3)	SCE (n=1)	Hired additional employees (n=4)
1 – 10	2		2
11 – 20			
20 – 30 +	1	1	2

ME2B. Did these employees receive EUC training (before or after they were hired)?

ME2B	PG&E (n=3)	SCE (n=1)	Hired additional employees (n=4)
Before			
After	2	1	3
Both			
Other: "Yes" – PG&E contractor			

ME2C. What is their expected duration of employment?

ME2C	PG&E (n=3)	SCE (n=1)	Hired additional employees (n=4)
Permanent	3	1	4
Other			

ME2D. Do you do the EUC work through a special department of your company, or is it an integral part of your operations?

ME2D	PG&E (n=3)	SCE (n=1)	Hired additional employees (n=4)
Special department			
Integral	3	1	4

ME3. Are you or your company planning to add more staff as a result of program?

ME3	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes		2	2
No	4	1	5
Not applicable		1	1

ME3A. If yes, approximately how many are you planning to add?

ME3A	SCE (n=2)	Planning to add more staff (n=2)
1	1	1
50	1	1

ME3B. Will these employees be EUC certified?

ME3B	SCE (n=2)	Planning to add more staff (n=2)
Yes		
Maybe	2	2
No		

ME3C. What is their expected duration of employment? (3 months, 6 months, etc.)

ME3C	SCE (n=2)	Planning to add more staff (n=2)
Permanent	2	2
Depends on jobs		

ME4. Have you or your company had to lay off any employees as a result of a lack of demand for the program

ME4	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes			
Maybe			
No	2	3	5
Not applicable	2	1	3

ME4A. If yes, approximately how many were laid off?

Not applicable to any respondent.

ME6. Approximately how many energy assessments do you complete in an average month?

ME6	PG&E (n=4)	SCE (n=4)	Total (n=8)
1 – 9	1	2	3
10 – 20	1		1
21 – 30	1		1
31 – 40	1		1
41 – 50			
51 – 60			
61 – 70			
71 – 80			
81 – 90			
91 – 100 +		1	1
Not applicable		1	1

ME7. Would you say that the number of audits you complete are increasing or decreasing?

ME7	PG&E (n=4)	SCE (n=4)	Total (n=8)
Increasing	2	3	5
Decreasing	2		2
Not applicable		1	1

ME6. Would audit subsidies help close a retrofit sale?

ME6	Utility
"Yes. SMUD rebates already have"	PG&E
"Yes. Rebates for assessments are going away, and people are rushing to take advantage of it."	PG&E
"Yes, they already have."	PG&E
"No"	PG&E
"Yes. That is working in Phoenix"	SCE
"Yes"	SCE
"Yes, HERS subsidies already do."	SCE

ME8. Do you have a sense that in the next three months the number of audits you complete are going to increase or decrease, if at all?

ME8	Utility
“Increase”	PG&E
“Decrease, Audit subsidies are ending.”	PG&E
“Decrease”	PG&E
“Same, at capacity”	SCE
“Stay the same...the program can’t handle a faster rate.”	SCE
“Increase”	SCE

ME9. How many customers that purchased EUC rebated measures probably would have purchased the measures anyway if the program hadn't existed. Would you say ALL, MANY, SOME, or NONE?

ME9	PG&E (n=4)	SCE (n=4)	Total (n=8)
All			
Some	2	3	5
Many			
None			
No Answer	2	1	3

ME10. Are customers generally installing the EUC rebated measures as part of larger retrofit or remodeling project?

ME10	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes			
No	2	3	5
Don't know	1		1
Not applicable		1	1
No answer	1		1

ME11. Have any of your EUC projects been inspected by anyone working for the EUC program?

ME11	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	3	5
No			
Don't know	1		1
Not applicable		1	1
No answer	1		1

ME11A. If yes, what, if anything, did you learn through the inspection process?

ME11	Utility
"Some procedures were not as efficient as they could have been, especially with multiple systems"	PG&E
"I used it as a mentoring session. CAS testing, blower door, duct blaster, what they look for. It was very good."	PG&E
"Yes, both us and the inspectors."	PG&E

ME11B. What, if anything, have you applied or will you apply to subsequent projects that you learned about through the inspection process?

ME11B	Utility
"Some procedures were not as efficient as they could have been, especially with multiple systems"	PG&E
"I used it as a mentoring session. CAS testing, blower door, duct blaster, what they look for. It was very good."	PG&E

### Program Satisfaction

I'm going to ask you a series of questions that are intended to determine your satisfaction with the EUC program.

PS1A. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Communications with the utilities about program requirements?

PS1A	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree		2	2
1			
2		1	1
3			
4			
5	1		1
6	3		3
7			
8		1	1
9			
10 – Completely Agree			

PS2A. Why do you give that rating?

PS2A	Utility
“It takes a long time, and there is a lot of back and forth. There are too many people running the program; you may not hear of rule until it is already too late. A job may not qualify for reasons x,y,z, but you didn't know that beforehand.”	SCE
“Consumers don't understand the requirements, and I have to educate all of the consumers.”	SCE

PS1B. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Communications with local government about program requirements?

PS1B	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree		1	1
1			
2			
3	1		1
4			
5			

6	1	1
7		
8	2	2
9		
10 – Completely Agree	2	2
Don't know	1	1
Not applicable		

---

PS2B. Why do you give that rating?

PS2B	Utility
"Have not seen any"	PG&E
"Don't see much backing at all."	SCE

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PS1C. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: The paperwork requirements for the program?

PS1C	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree		2	2
1			
2		1	1
3	2		2
4	1		1
5	1	1	2
6			
7			
8			
9			
10 – Completely Agree			

---

PS2C. Why do you give that rating?

PS2C	Utility
"There is so much of it, and it is so repetitious."	PG&E
"Redundancy. There should be one portal for everything."	PG&E

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"Sheer amount of it. It changes all of the time. Local governments ask for different things, each application has several iterations."

PG&E

"It is such tedious work. You are not changing your windows, but if it is off by one, you have to redo everything, redo the calculations, and send it back. We are not office people; otherwise we would be sitting in an office."

SCE

"A lot of redundancy."

SCE

PS1D. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: The Energy Pro modeling software?

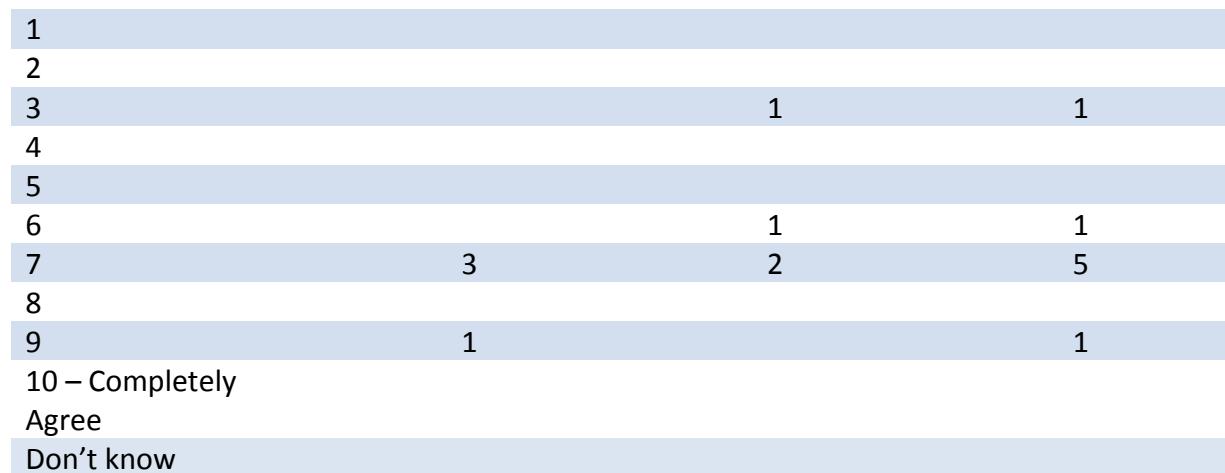
PS1D	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree		1	1
1			
2			
3			
4	1		1
5		1	1
6	1	1	2
7	2		2
8		1	1
9			
10 – Completely Agree			

PS2D. Why do you give that rating?

PS2D Utility  
"Hard to use, confusing for customer"

PS1E. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Marketing support from the local government whose jurisdiction you most often work?

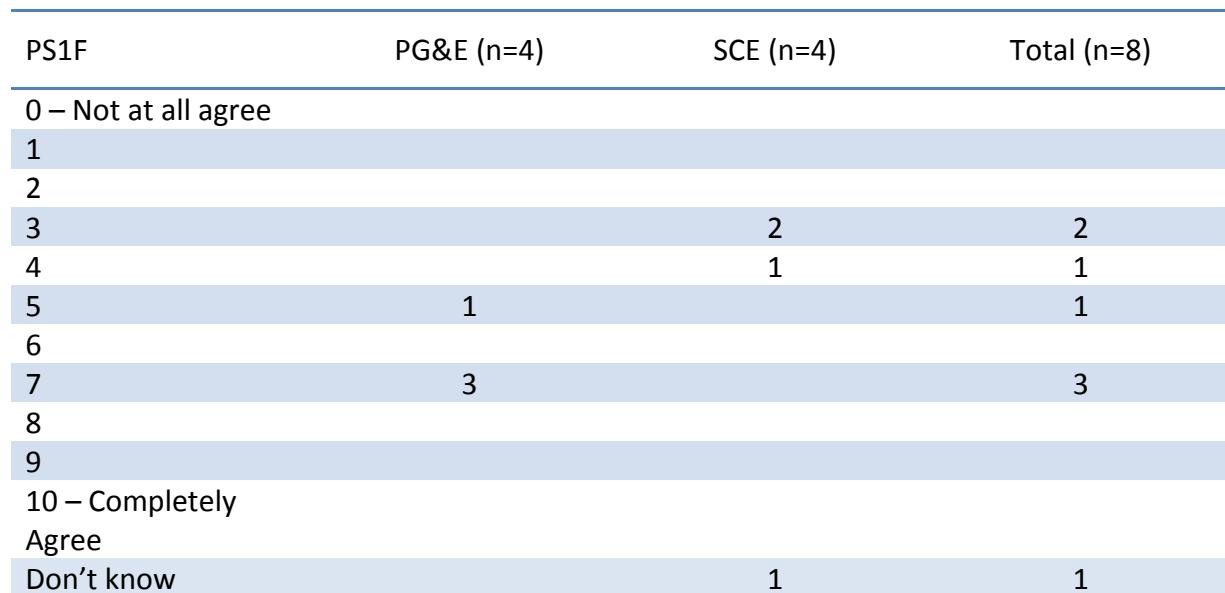
PS1E	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			



PS2E. Why do you give that rating?

Not applicable to any respondent

PS1F. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Marketing support from the utility?



PS2F. Why do you give that rating?

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PS2F	Utility
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"Haven't done much. Maybe a bill insert.

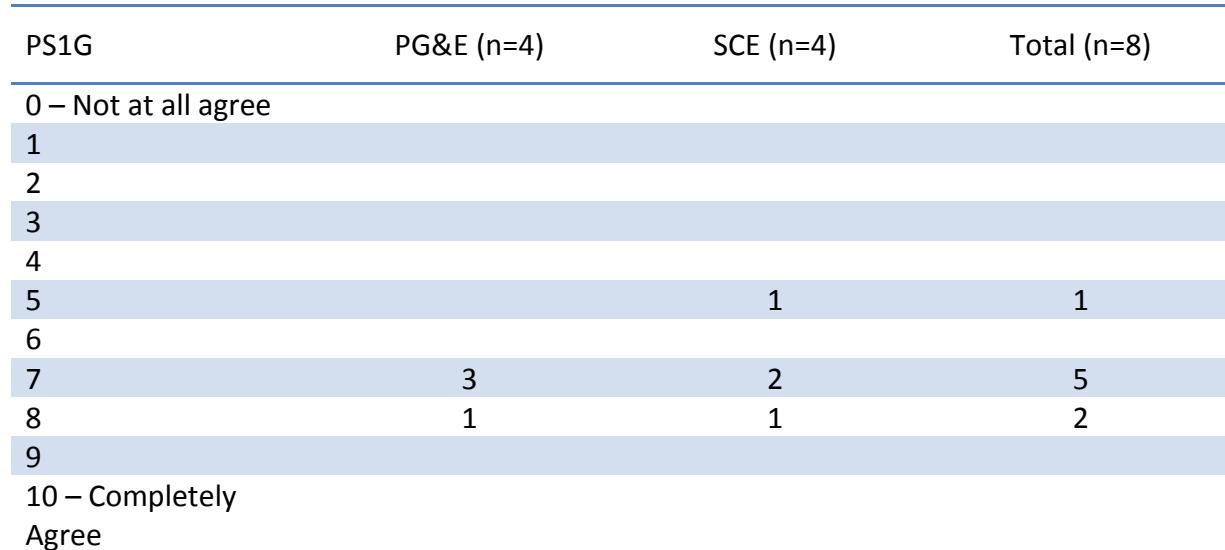
SCE

"Haven't seen much, other than an email blast."

SCE

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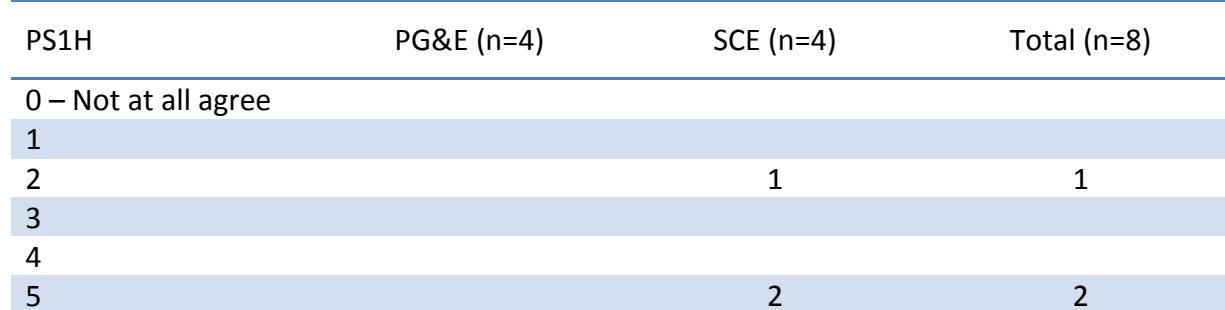
PS1G. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Training offered by the program?



PS2G. Why do you give that rating?

PS2G	Utility
"They need more time in combustion safety, an more hands-on training."	SCE

PS1H. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Program incentives?





10 – Completely  
Agree

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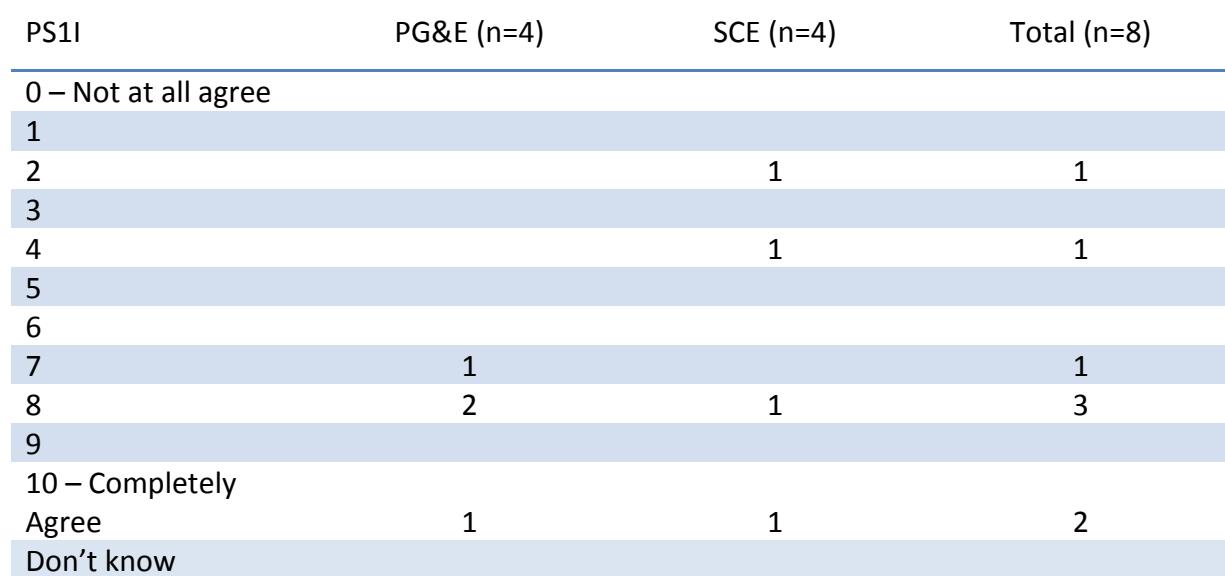
PS2H. Why do you give that rating?

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PS2H	Utility
"LADWP and SoCal Gas is limited to the LA county incentives"	SCE

PS1I. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Additional local government incentives

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PS2I. Why do you give that rating?

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PS2I	Utility
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"LADWP and SoCal Gas is limited to the LA county incentives"

SCE

PS1J. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Program measure installation requirements

PS1J	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree		1	1
1			
2			
3			
4		1	1
5	1		1
6	1		1
7			
8	2	1	3
9			
10 – Completely Agree		1	1

PS2J. Why do you give that rating?

PS2J Utility

"Except for air-sealing. At school they say to work your way down from the top, but not if you have a certain type of foundation. In SoCal, air sealing doesn't give you much savings because of the climate." SCE

"Some things that are required that should not be, like thermostatic control valves on showers. Some things should be required, like fluorescent light bulbs." SCE

PS1K. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Program overall?

PS1K	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1		1	1
2			

3			
4			
5			
6			
7	1	1	2
8	2	2	4
9	1		1
10 – Completely Agree			

---

PS2K. Why do you give that rating?

Not applicable to any respondent

PS3. What would you say are the positive features of the program overall?

PS3	Utility
"It is stimulating people to get HVAC work, which is our specialty"	PG&E
"Extra business."	PG&E

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PS4. What would you say are the biggest problems of the program overall?

PS4	Utility
"Test-in. It is hard to know if another contractor's test-in is accurate."	PG&E
"Paperwork is repetitive and time consuming. The transfer from the CBPC to BIG screwed a lot of things up. BIG is very strict about applications. There is a lot of back-and-forth for very small details."	PG&E
"In the construction industry there are callbacks, and you have limitations on what you can work with. It isn't an isolated box in a laboratory. This perception that it can be like that and that you can change the industry overnight is never gonna happen. If you expect people who have a 5,10,20 year history to start playing by these new rules, it is a total joke. Instead of getting people to do home performance, you are showing people what a pain in the ass it is to be regulated by a utility company and have RHA come and wipe their ass after every job they do. We founded the company around this Home Performance, so we will keep feeding people in, but you are never going to get Joe Schmo if you make it this hard. I've called my supposed account manager from ICF three days in a row and I haven't gotten a call back yet. I know they are slammed, because I deal with it too."	SCE
"Education of the clients. It is there, but they are not taking the time to read it. It is so complicated for the average person to understand."	SCE

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PS5. How do you feel about local government's involvement in the program overall?

PS5	Utility
"There isn't very much. Related programs are good, like the single item rebate program, and are easier to use, but nothing that directly works with EUC."	PG&E
"LA county is great."	SCE

PS6. How can the program make the rebate process easier/faster for you?

PS6	Utility
"You could have a 3rd party who has no stake in the outcome do the initial audits."	PG&E
"Consolidate paperwork."	PG&E
"Not sure. They seem like problems that are inherent in a new program and will iron themselves out with experience. There are processing delays. Other data management strategies could have been sued at day 1, but they are so deep in now they jus have to push through and work them out. For instance EmHome isn't just the modeling software, it is the submission process and everything. It makes it much less redundant and you don't need multiple tracking systems like they have now."	SCE
"In the construction industry there are callbacks, and you have limitations on what you can work with. It isn't an isolated box in a laboratory. This perception that it can be like that and that you can change the industry overnight is never gonna happen. If you expect people who have a 5,10,20 year history to start playing by these new rules, it is a total joke. Instead of getting people to do home performance, you are showing people what a pain in the ass it is to be regulated by a utility company and have RHA come and wipe their ass after every job they do. We founded the company around this Home Performance, so we will keep feeding people in, but you are never going to get Joe Schmo if you make it this hard. I've called my supposed account manger from ICF three days in a row and I haven't gotten a call back yet. I know they are slammed, because I deal with it too."	SCE
"Improve the website. Making the information easier to navigate. There are so many programs to go through."	SCE

## Program Design

PD1. What do you see as the strengths of the basic upgrade package of the program?

PD1	Utility
"None"	PG&E
"There is little advantage. We do them when we can't justify enough savings another way. It is for jobs that don't quite meet up with advance package qualifications."	PG&E
"It gets done quicker. The program administration is less frustrating with this path." "We have only done one."	SCE

PD2. What do you see as the weaknesses of the basic upgrade package?

PD2	Utility
"Basic requires air sealing, which is expensive and has a low rate of return. \$1500 doesn't even cover removing old insulation, let alone the sealing or adding new insulation."	PG&E
"It is very hard to get your paperwork processed through BIG. It is supposed to be quicker and streamlined, but BIG doesn't see very much of these, so it takes longer. The addition of the Test-in/test Out (where it wasn't required before) make it take longer, so it loses some of its advantage."	PG&E
"Most can qualify for advanced with just a little more investment."	PG&E
"Almost everything we do is for the Advanced package. Most of the time you could submit a basic path job as an advanced and get more rebates. I think we have done about 10 out of 200 or so."	PG&E
"The requirement to have RH11 or below kicks out anyone who might qualify. That is basically no insulation. It takes 8 weeks to get through it, for just a few basic measures."	SCE
"Should be doing testing anyway, even though it isn't covered by the package. Duct Sealing and Air Sealing require testing, but if you do testing you may as well do the Advanced package.'	SCE
"If they qualify, they usually can qualify for the Advanced and get more money. The Basic is too narrow."	SCE

PD3. Could the basic upgrade package be improved in any way?

PD3	Utility
"Basic requires air sealing, which is expensive and has a low rate of return. \$1500 doesn't even cover removing old insulation, let alone the sealing or adding new insulation."	PG&E

"It is very hard to get your paperwork processed through BIG. It is supposed to be quicker and streamlined, but BIG doesn't see very much of these, so it takes longer. The addition of the Test-in/test Out (where it wasn't required before) make it take longer, so it loses some of its advantage."

PG&amp;E

PD4. What do you see as the strengths of the advanced upgrade package of the program?

PD4	Utility
"I like this one."	SCE

PD5. What do you see as the weaknesses of the advanced upgrade package?

PD5	Utility
"Processing of the paperwork should be more flexible."	PG&E
"To get 10% savings, you are right there on the border of being able to get that with tier 1 measures (duct seal, air seal, and insulation, on a really bad house) you can usually get to 10%. That is where it is cost effective, but those are the people who keep getting thrown out of the program. Once you get beyond that it is HVAC or window swap outs which are big ticket items, which is why your average job costs are \$12,000 and getting \$2000 back. You have missed the entire low market. It is for rich people who can do \$10,000 out of pocket."	SCE
"The time it takes to get a project through is a hassle."	SCE

PD6. Could the advanced upgrade package be improved in any way?

PD6	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes		1	1
No			
Don't know	2	1	3
No answer	2	2	4

PD6A. If yes, how?

PD6A	Utility
“Remove the thermostat controller in the shower. It only makes sense if it is a standard shower, and doesn't take into account how people actually use their tub/shower combination. They are also not cheap. The air-sealing requirement should be removed, not because it isn't important, but it often doesn't justify the cost. It doesn't seem in line with how air sealing is treated in BPI.”	SCE

PD7. Would you prefer to use software other than EnergyPro for modeling?

PD7	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	1	4	5
No			
Don't know	2		2
No answer	1		1

PD7A. If yes, what?

PD7A	Utility
“Recurve”	PG&E

### Inter Contractor Conversation

ICC1. Have you talked to other contractors outside of your company about the EUC program?

ICC1	PG&E (n=4)	SCE (n=4)	Total (n=8)
Yes	2	4	6
No	2		2

ICC1A. If yes, what is the nature of those conversations?

ICC1A	Utility
“Bragging about big-ticket jobs they have sold through the program.”	PG&E
“I've gotten a couple of them involved in it and told them how it can get them more	PG&E

work."

"It's too difficult, and they are not happy with it."

PG&E

"Most contractors out there sell against the program. It is a lead generation service, they tell people how awful the program is and say "let me give you a good price". I hear it all the time."

SCE

"They are frustrated about the time period it takes to get the paperwork done, and the amount of work that has to be done. We are expected to be perfect, but the program isn't perfect. It takes too long to get paid, and the program administration is handled poorly."

SCE

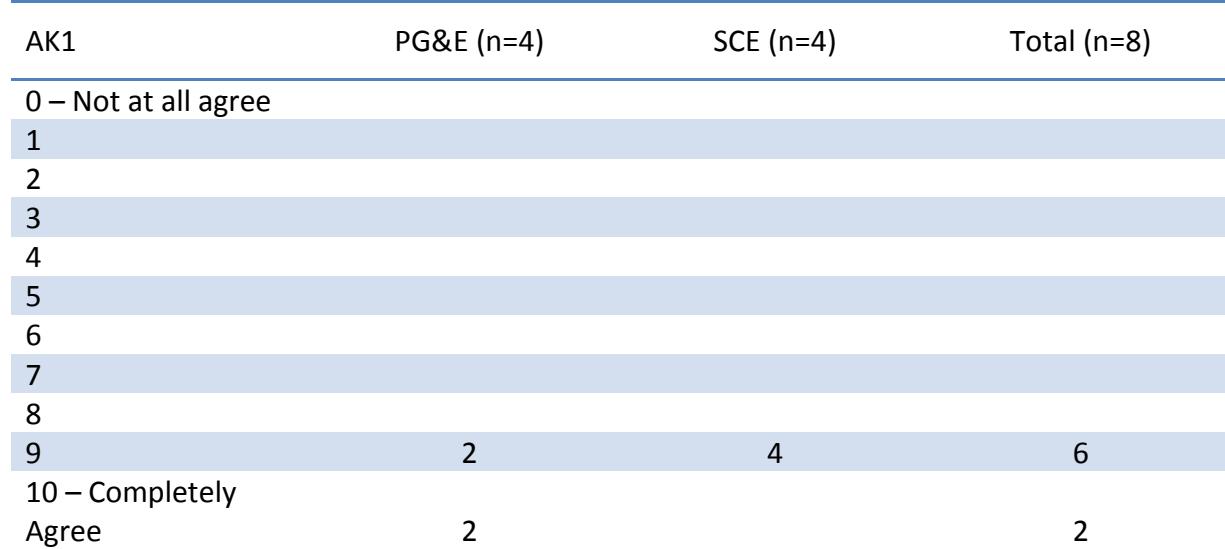
"Difficulty in translating what they have learned in class to the field. Some of the upgrades are not cost effective according to BPI standards. There is a lot of work to get a job."

SCE

#### AKA-B

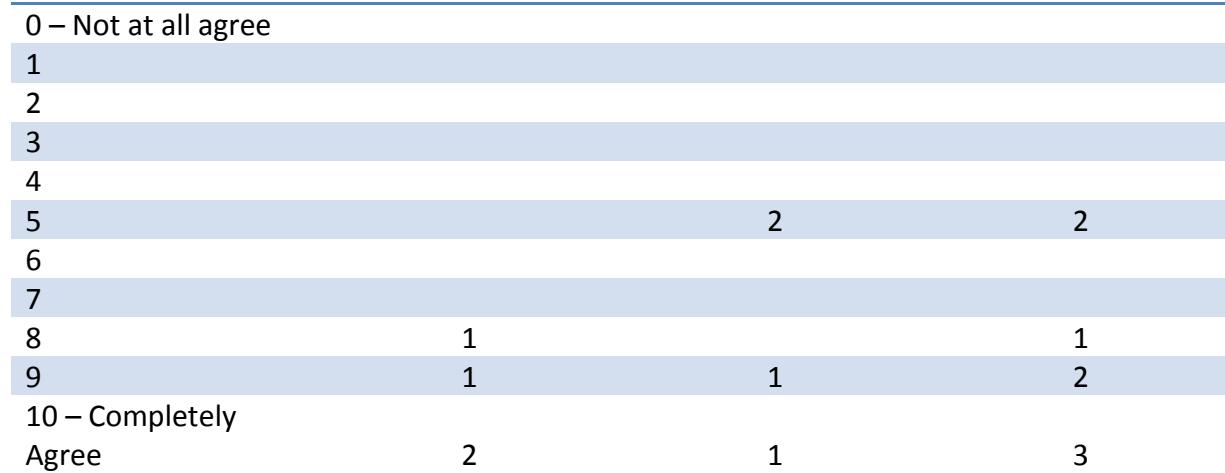
I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means Completely agree, please tell me how much you agree with each statement.

AK1. The comfort of a home that has sealing around windows and doors, insulated walls and attics, insulated hot water systems, and all high-efficiency appliances would be significantly greater than that for a home without these features.

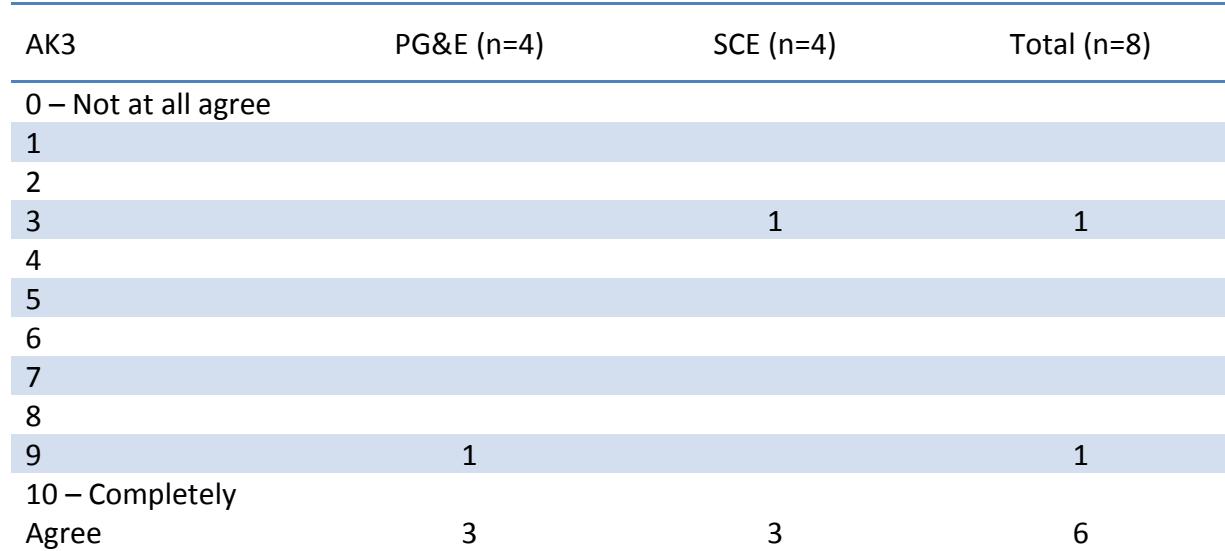


AK2. The energy costs of a home that has these features would be significantly less than one that does not.

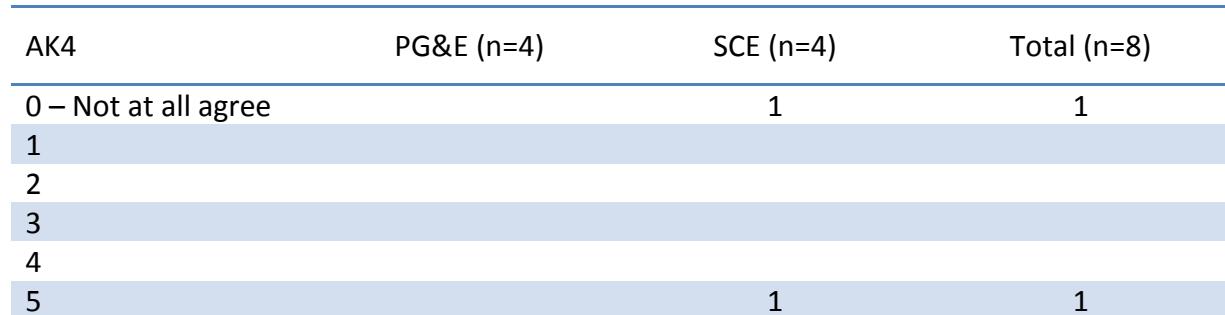
AK2	PG&E (n=4)	SCE (n=4)	Total (n=8)
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AK3. Household electricity use has an impact on the environment.

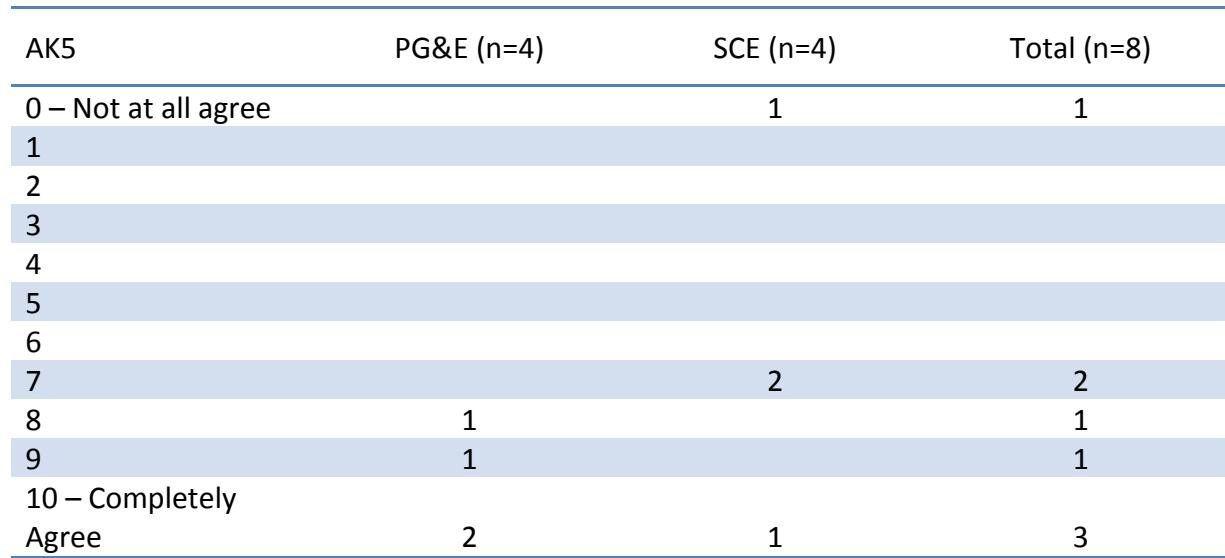


AK4. I am concerned that global climate change will increase if homeowners do not make their homes more energy efficient.

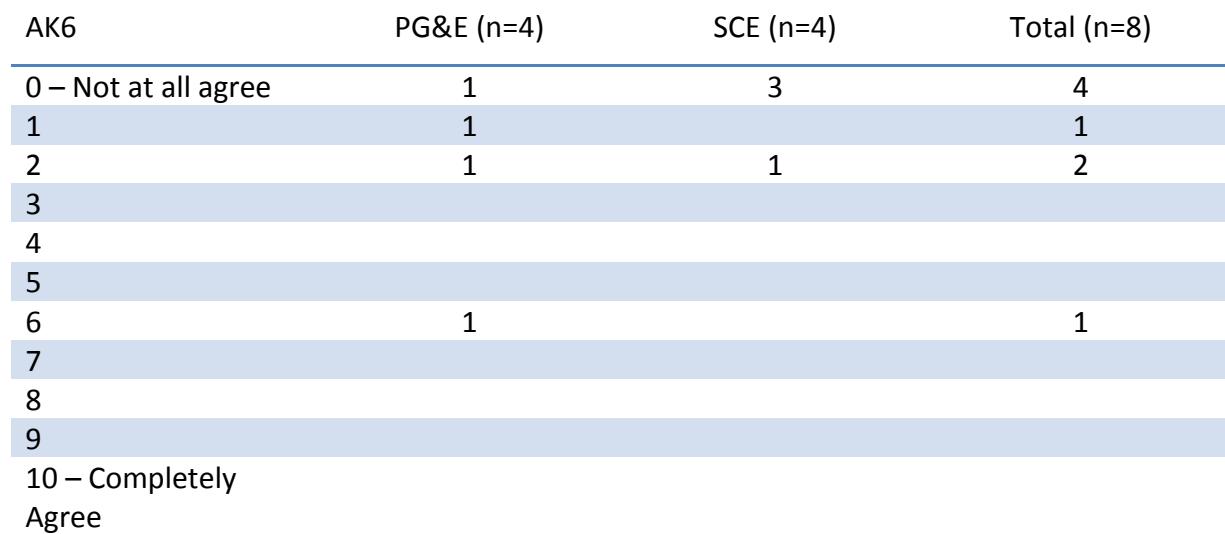




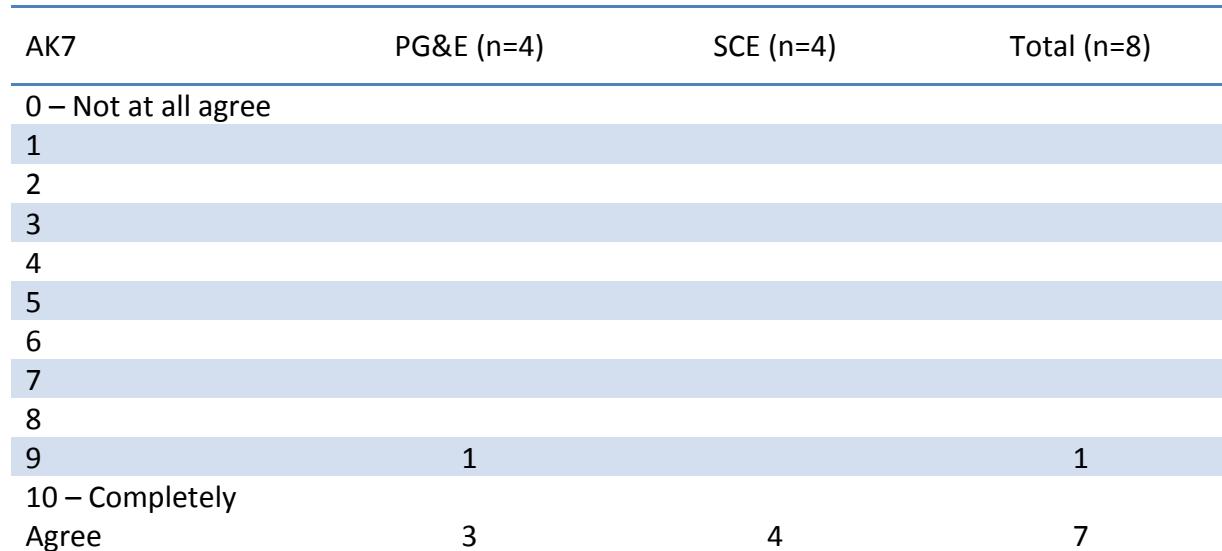
AK5. It is my responsibility to highlight the potential financial savings that can result from energy assessments and retrofits to my customers.



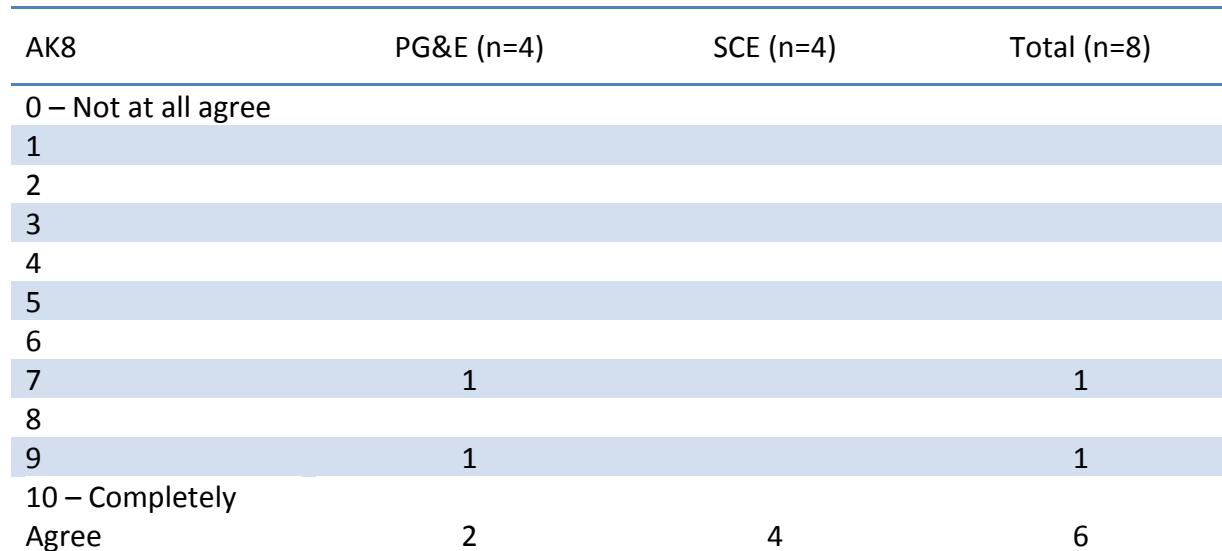
AK6. It is not my responsibility to help the environment by encouraging my customers to save energy.



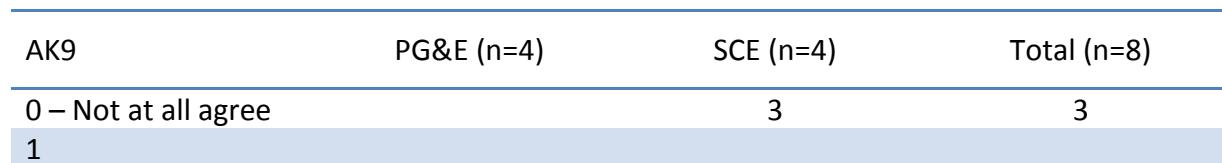
AK7. I intend to promote energy efficiency to my customers.

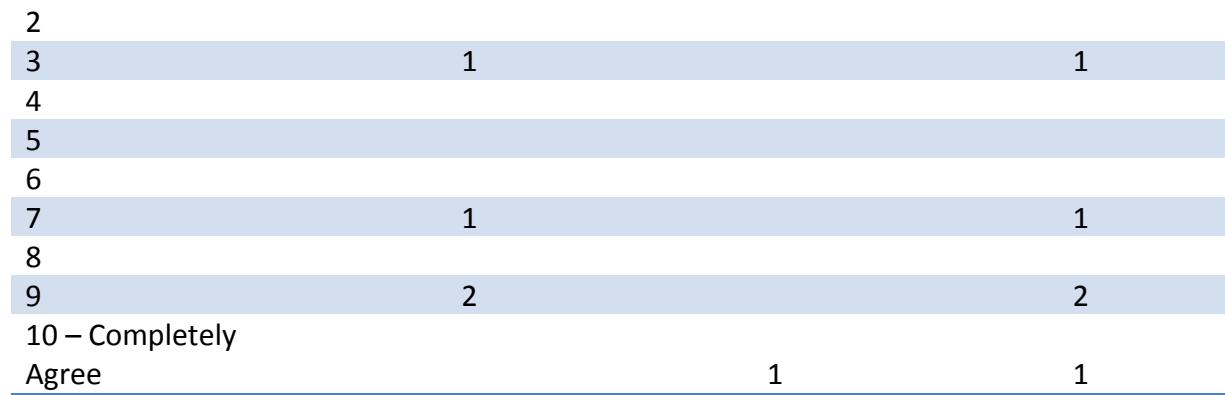


AK8. I very often encourage my customers to do a comprehensive retrofit of their homes to reduce energy use and increase comfort.

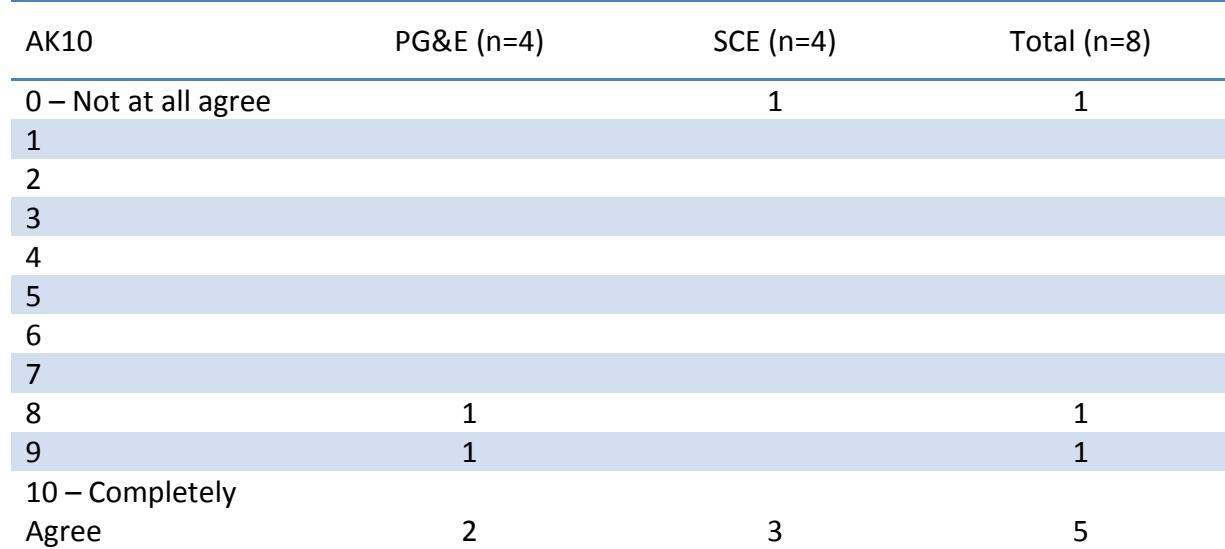


AK9. I often worry that the cost of energy for my *own* home will increase.

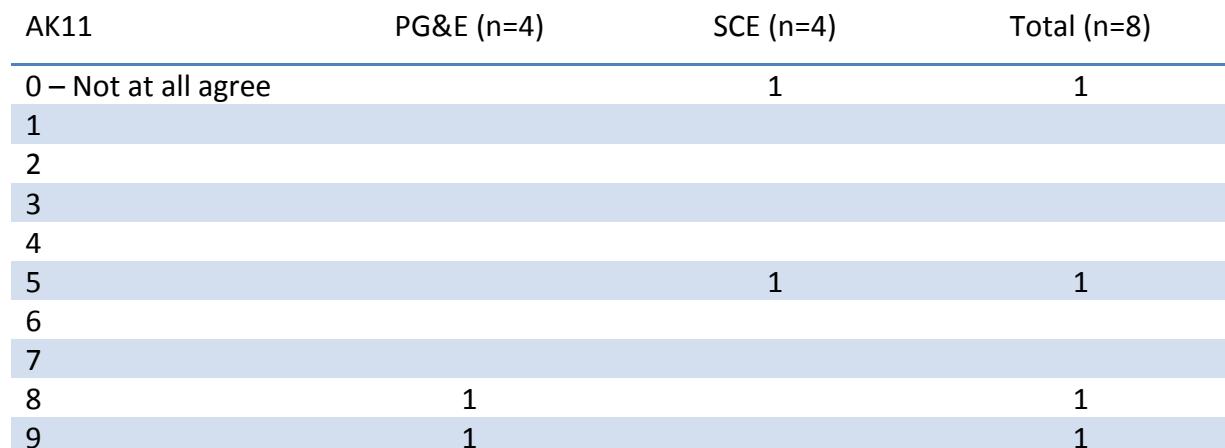




AK10. I am very concerned about how energy use affects the environment.



AK11. I have to take the lead in my *own* household if we're going to keep our utility bills down.



10 – Completely Agree	2	2	4
-----------------------	---	---	---

AK12. It is not my responsibility to use as little energy as possible to help the environment.

---

AK12	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree	1	3	4
1	1		1
2			
3	2		2
4			
5			
6			
7		1	1
8			
9			
10 – Completely Agree			

AK13 I intend to conserve on electricity consumption in my *own* home this summer.

---

AK13	PG&E (n=4)	SCE (n=4)	Total (n=8)
0 – Not at all agree			
1			
2			
3			
4			
5			
6			
7		1	1
8	1		1
9	2		2
10 – Completely Agree	1	3	4

## Closing

CL1. Those are all the questions I have. What else do you think we would want to know about your experiences with the program based on our conversation today?

CL1	Utility
<p>"We have seen some bad testing. We are called in to give a second or third opinion after another company has come out to do the testing, and sometimes we see that a duct is just not attached. If you leave it that way you can get a really high reduction in energy use, but it's easy to see a fix on that. One company was guaranteeing customers a certain level of rebate, but said "if it goes over that, we get the difference." The most likely reason they can do that is because of sloppy or misleading audits."</p>	PG&E
<p>"When we do an EUC project in Eukia, PG&amp;E takes away a portion of their rebate because they live in Eukia. That's wrong, and they don't do that anywhere else. Eukia has their own electricity, but not natural gas, so PGE doesn't want to pay the full rebate. Also, it is really important to have a financing program. Rebates are fine, but if you can't afford it up front, then they don't mean a thing."</p>	PG&E
<p>"It's working great; it has really helped my business. The test in subsidies really gets the ball rolling."</p>	PG&E
<p>"There was a big issue with the background check. It is unfair and restrictive. There are programs specifically for rehabilitating people who have come through the justice system, and now we can't use those. Also, different standards on combustion safety. BPI has standards, but PG&amp;E has even more strict rules, which will make it difficult to make sales. We also don't know if we will have to do them. Communication with the local administrators and local program is great, but communication with PG&amp;E is very difficult."</p>	PG&E
<p>"The type of equipment used to do assessments...currently there are 2 different manufacturers. There is a rumor that SCE will mandate one or the other. That would not be a fair decision."</p>	SCE
<p>"You are trying to take all of these contractors and make them masters of building science...you're never going to get a contractor to change his whole business model and fit that industry. You are creating this cottage specialized industry because it is such pain in the ass to get jobs through it. Also, it is a joke that CBPCA takes 4 weeks to do a BPI course. The people doing the QA/QC on this are flying their people out of state cause they could do the training in three days and pay \$50 because of utility grants there. So for a course that is 3-4 days in every other market, the California tax payer is getting screwed by turning it into a 4 week course. The people quality controlling my job didn't even take the course here. the program has gotten worse in the past three months. It was getting better but they brought all of these new people in. It seems like they are looking for reasons to kick people out. I don't like waiting 6 months to get paid...I don't like getting checks for jobs we did in August and September. Homeowners don't like waiting a month to 6 weeks before they get approval. Riverside Public Utilities Whole house program is a great model. They are quick and we have never had an issue."</p>	SCE
<p>"This program is getting intelligent contractors. It isn't just trade, but understanding it. Also, SCE should be doing the energy testing. Let me just give them the information and they can put it in however they want to do it. Just let me upload it</p>	SCE

and be done with it. Every rebate has more paperwork...I'm swamped."

"The biggest thing that SCE can do, similar to what SoCal Gas is doing, is make the paperwork easier for the contractor. Also, reduce the redundancy between energyPro and the Job Reporting Template and everything else.

SCE

## 4.2.5. Group E: Davis Energy Pilot

### Contractor Background

C1. Can you describe the types of services you provide to customers?

C1	PG&E (n=2)	SCE (n=5)	Total (n=7)
HVAC	2	5	7
Building audits and testing	2	5	7
Windows	2	5	7
Insulation	2	4	6
Home remodeling	2	5	7
New home construction		2	2
Other (Specify)	1	4	5

C2. How many employees does your company have serving SCE territory?

C2	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – 3	2		2
4 – 7		3	3
8 – 11			
12 – 15		2	2

C3. How many employees does your company have serving PG&E territory?

C3	Utility
"Office: 30, Field 15	PG&E
"Yes"	PG&E
0	SCE
4	SCE
0	SCE

7	SCE
0	SCE

### BPI Certification

B1. Is your company accredited by BPI?

B1	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	3	5
No		2	2

B1A. If no, can you tell me why it isn't?

B1A	Utility
"The administrative cost is prohibitive. It is too time consuming, and not worth it."	SCE
"There is no public recognition, there is no benefit, and it is expensive."	SCE

B1B. If yes, did you receive financial aid from an outside source to do so?

B1B	PG&E (n=2)	SCE (n=3)	BPI accredited (n=5)
Yes		1	1
No	2	2	4

B2. How many BPI certified individuals does your company have in SCE territory?

B2	PG&E (n=2)	SCE (n=5)	Total (n=7)
0	2		2
1		1	1
2			
3		1	1
4		2	2
Other: "Yes" – SCE Contractor			

B3. How many BPI certified individuals does your company have in PG&E territory?

B3	PG&E (n=2)	SCE (n=5)	Total (n=7)
0		3	3
1			

2			
3	1	1	2
4		1	1
5 and up	1		1

B4. What role(s) do these BPI certified personnel play relative to EUC installations and procedures? (Multiple answer)

(Showing # that said "yes" to role)	PG&E (n=2)	SCE (n=5)	Total (n=7)
Perform combustion appliance safety testing	2	5	6
Perform the EUC installations and procedures themselves	2	4	6
Teach others the appropriate procedures	2	5	7
Assure quality of others' EUC work	4	3	7
Perform test in and test out	2	5	7
Conduct energy modeling	2	5	7
Other			

B5. What is your opinion of the BPI approach? Why do you say that?

B5	Utility
"It's good. The standards help you gauge your work."	PG&E
"I like it. It makes sense. It is the way I was taught, it is the loading order like, it is logical. It is two different beasts than HERS...BPI is about getting the work done."	PG&E
"It is probably the most stringent standard in the country, but it seems that the standards are subject to change by the utilities. For example, during the BPI training you are taught that you are allowed to test a house with existing asbestos if you pressurize the house, but the utilities put pressure on BPI to change that. It was an eye opener that the "standard" is not always consistent. BPI does serve the goal of home performance. It doesn't need to be combined with any other set of standards."	SCE
"It is a great stepping stone, but it is limited in terms of installation quality, because the building analyst certification doesn't provide enough hands on training. The funding isn't there to really do the work. If you are not a contractor to begin with and already understand basic construction, BPI certification won't give you that."	SCE
"It is a good approach. It is helpful to have those standards and protocol."	SCE
"We love it. It makes people understand what they are doing. It raises awareness."	SCE
"It is a good start, and we do need to have a standard. It is not the whole picture. We do a lot more over an above what BPI provides."	SCE

### **Contractor Recruiting, Training, and Mentoring**

R1. How many of your employees attended the EUC Participation Workshop?

R1	PG&E (n=2)	SCE (n=5)	Total (n=7)
1 – 5		4	4
6 – 10	1		1
11 – 15		1	1
Other: "Yes" – PG&E contractor			

R1A. After attending the Participation Workshop, did you feel that your organization was prepared to participate in the EUC program?

R1A	PG&E (n=1)	SCE (n=5)	Attended EUC workshop (n=6)
Yes		2	2
No		3	3
Don't know	1		1

R1B. If no, why not?

R1B	Utility
"They kept changing the program."	PG&E
"It was a good overview, and it got us ready for "next steps", but we needed more training for full participation. They did do a good job of explaining a complex process."	SCE
"Back when it first started the trainers didn't have answers, and the students were very new."	SCE
"We were behind and needed to get ready with equipment and training."	SCE
"We were prepared prior to that. We are a HP contracting company that was being built just before EUC got rolling."	SCE

R2. How many of your employees attended the 3-day Basic Path training offered by [IOU]?

R2	PG&E (n=2)	SCE (n=5)	Total (n=7)
3	1		1
4			
5		1	1
6		1	1
None	1	3	4

R2A. After attending Basic Path training, did you or your staff feel prepared to perform the tasks required for the Basic Upgrade Package?

R2A	PG&E (n=1)	SCE (n=2)	Attended 3-day Basic Path training (n=3)
Yes		1	1
No		1	1
Don't know		1	1

R2B. If no, why not?

R2B	Utility
"We only do the Advanced package."	PG&E
"CBPCA competitor"	SCE
"That shouldn't be the expectation. There is a lot more you have to learn."	SCE
"Our focus was mostly on the Advanced path. Given the paperwork involved and the customer base we were working with (who already had some upgrades and didn't qualify) they didn't qualify."	SCE

R3. What training did your BPI certified personnel complete to help them obtain the certification? Obeys

R3	Utility
"CBPCA"	PG&E
"CBPCA"	SCE
"Through us. We are a BPI trainer. Some also got the training in New York."	SCE
"Long Beach City College, CollegeClean Energy Workforce Training, also CBPCA"	SCE
"CBPCA, leader grants, also in-house"	SCE
"The owner teaches courses for the CBP"	SCE

R3A. Who sponsored this training?

R3A	Utility
"No"	PG&E
"LA County"	SCE
"State Grant for Long Beach City College"	SCE
"CBPCA, leader grants, also in-house"	SCE
"Internal"	SCE

R3B. How many days of training did this involve?

R2A	PG&E (n=1)	SCE (n=2)	Attended 3-day Basic Path training (n=3)
1 – 3 days	1		1
4 – 6 days		1	1
Don't know	1		1

R3C. Did you receive a scholarship or a loan to finance the training?

R3C	PG&E (n=1)	SCE (n=2)	Attended 3-day Basic Path training (n=3)
Yes	1	1	2
No		1	1

R4. Have any of your staff who are not BPI certified received training that would help prepare them to implement EUC measures and procedures?

R4	PG&E (n=1)	SCE (n=2)	Attended 3-day Basic Path training (n=3)
Yes	1	1	2
No		1	1

R4A. If yes, what training did they receive?

R4A	Utility
"Webinars for filling out forms"	PG&E
"On the job training with a BPI certified staff member."	SCE
"Various. Internal."	SCE
"The owner is a CBPCA trainer. We can train them on anything we need to internally."	SCE

R5. What types of employees are responsible for the EnergyPro software modeling required for the program?

R5	Utility
"Owner"	PG&E
"President"	SCE

“Auditors”	SCE
“Owner and BPI technicians”	SCE
“Owner”	SCE
“Building Analysts”	SCE

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R6. Did anyone in your company use EnergyPro or any other home energy modeling software before participating in the program?

R6	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	2	4
No		3	3

R6A. If another software, which one?

R6A	Utility
“ReCurve”	SCE
“Recurve, then an in-house”	SCE
“ReCurve, TREAT”	PG&E
“Manual J and Manual D for HVAC sizing.”	PG&E

R6A. Have you received instruction on how to use the EnergyPro software program?

R6A	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	4	6
No			
Not applicable		1	1

R6A. If yes, on a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the EnergyPro instruction you received?

	PG&E (n=2)	SCE (n=4)	Received instruction (n=6)
0 – Not at all agree			
1			
2			
3			
4			
5	1		1



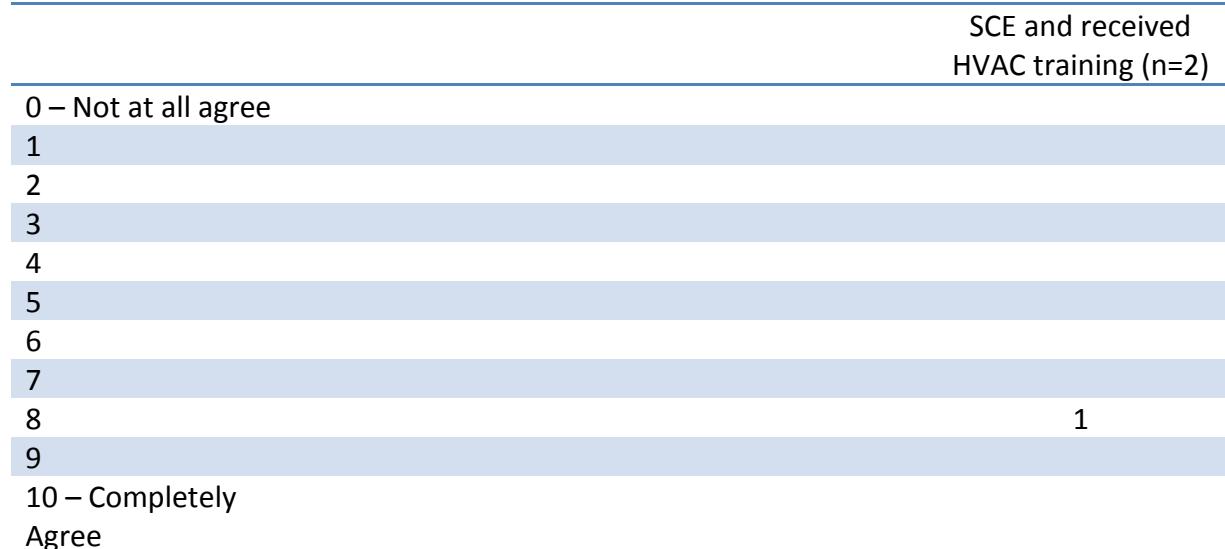
R6B. If no, why not?

R6B	Utility
"It was all over the board. It isn't a good program"	PG&E
"It did not go into more complex scenarios (i.e. two HVAC systems, or renewable, etc.)"	SCE
"When we started using it, no one was training on it."	SCE

R7. Did you receive training on how to size HVAC equipment based on the expected energy use and size of the home?

R7	SCE (n=5)
Yes	2
No	2
Not applicable	1

R7A. On a scale of 0-10 with 0 being not at all and 10 being very much, how much did you benefit from this training?



Don't know

1

R8. Are you currently participating in SCE's Energy Star Residential HVAC Quality Installation Program (QI)?

R8	SCE (n=5)
Yes	1
No	4

R9. Have you attended any training at [IOU] Energy Education Centers?

R9	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	3	5
No		2	2

R9A. If yes, did you complete the classroom training?

R9A	PG&E (n=2)	SCE (n=3)	IOU training (n=5)
Yes	2	3	5
No			

R9B. If yes, did you complete the field training?

R9A	PG&E (n=2)	SCE (n=3)	IOU training (n=5)
Yes	2	1	3
No		2	2

R9C If yes, have you completed your first job?

R9A	PG&E (n=2)	SCE (n=3)	IOU training (n=5)
Yes	2	3	5
No			

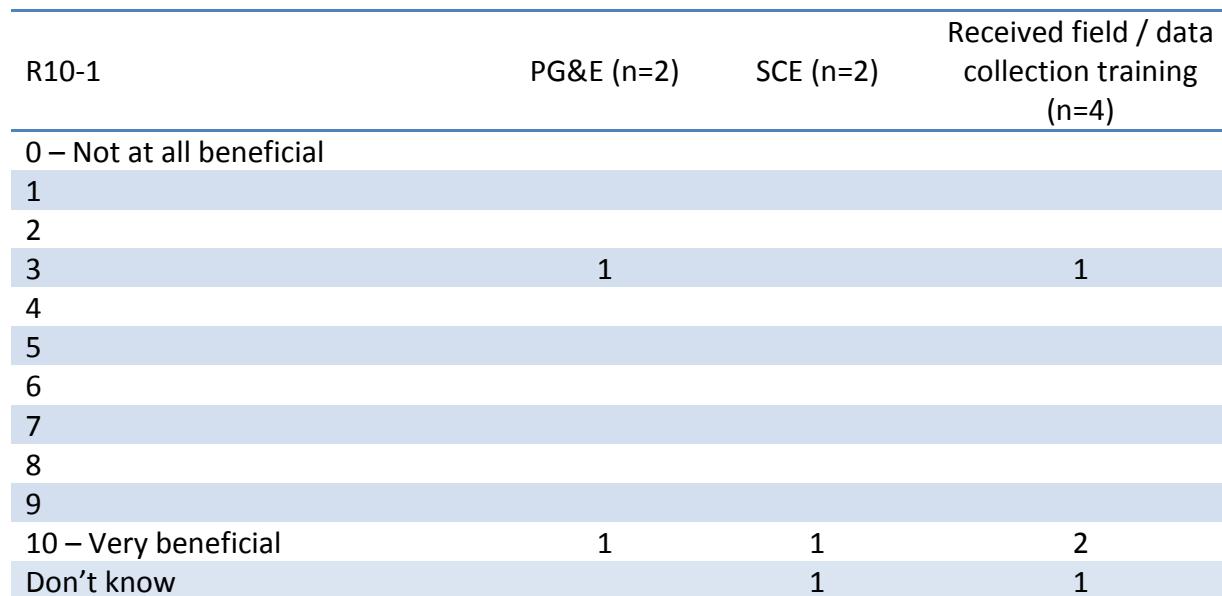
R10. Have you received any mentoring related to the EUC program?

R10	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	2	4
No		3	3

R10. If yes, which type(s) did you receive?

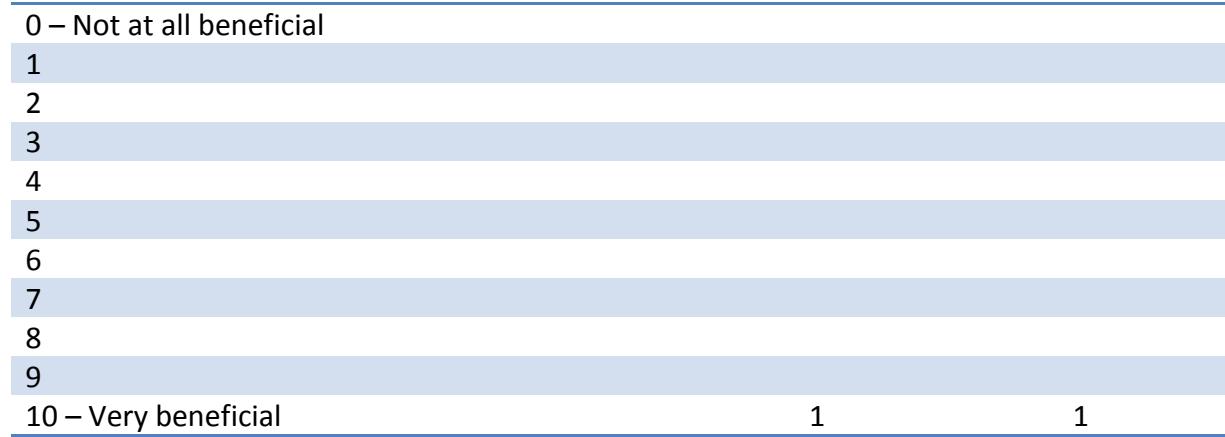
(Showing # that said “yes” to program components)	PG&E (n=2)	SCE (n=5)	Total (n=7)
Field / Data Collection	2	2	4
JRT (Job Reporting Template)/ Job Processing		1	1
Energy Pro software		1	1
Mentoring received during onsite Quality Control inspection	2	2	4

R10B-1. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the Field / Data Collection mentoring you received?

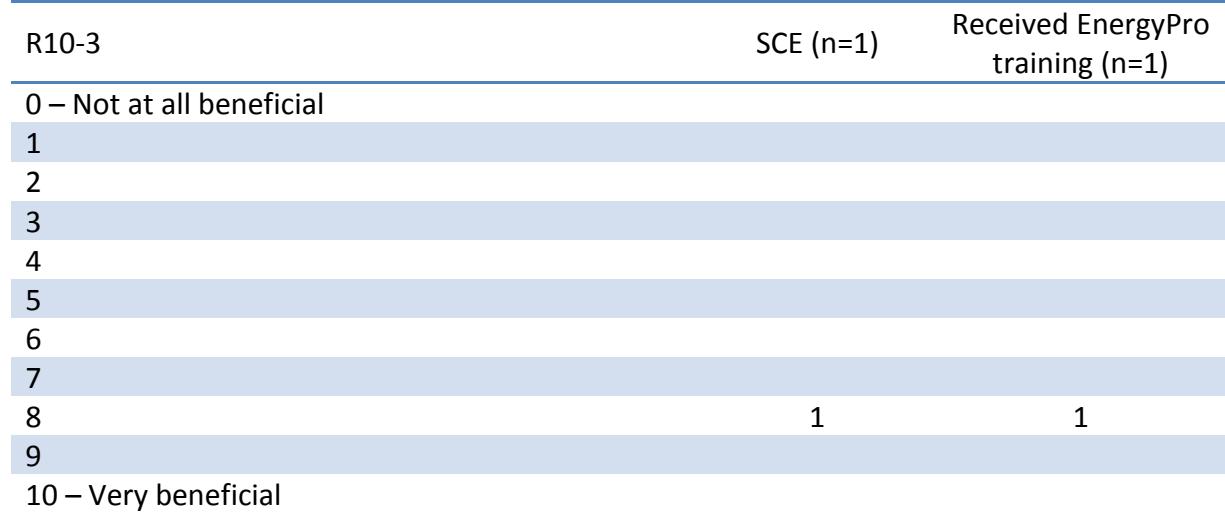


R10B-2. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the JRT (Job Reporting Template)/ Job Processing mentoring you received?

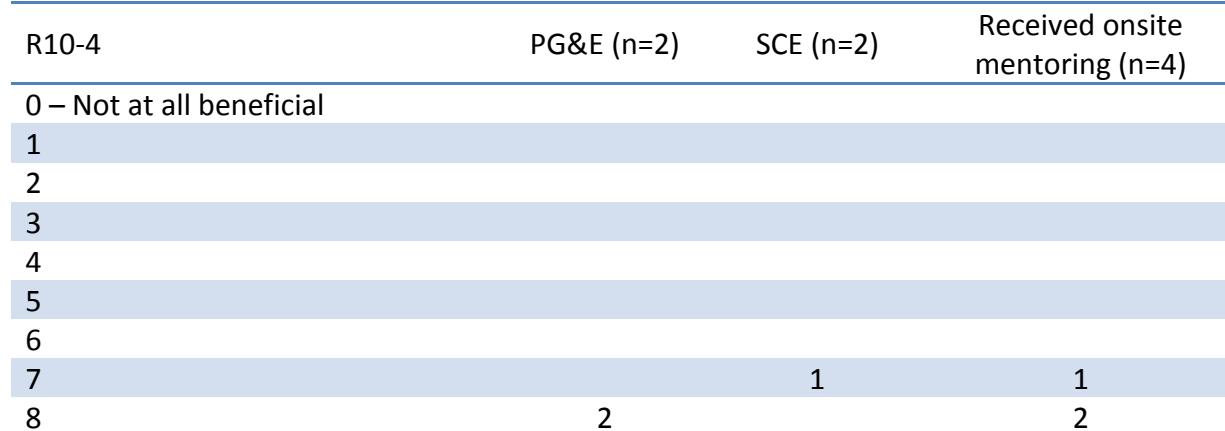
R10-2	SCE (n=1)	Received JRT training (n=1)



R10B-3. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the Energy Pro software mentoring you received?



R10B-4. On a scale of 0-10 with 0 being not at all and 10 being very much, how helpful was the mentoring received during onsite Quality Control inspection?



9	
10 – Very beneficial	
Don't know	1

R11. What other types of EUC-related training would benefit you or your staff?

R11	Utility
"Sharing contractor experiences. Requirements for participating in the program. Advanced Energy Modeling and Job processing."	PG&E
"HERS 12"	SCE
"No, but others need combustion testing training. They don't have enough support for that."	SCE
"Energy modeling. More mentoring."	SCE
"BA and Envelope training. Multi-family."	SCE
"Yes. JRTs, administrative paperwork, and EnergyPro related data entry and paperwork"	SCE

R12. Do you or your company have an interest in getting training on how to best market your company and its services?

R12	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes		1	1
No	2	4	6

R12A. If no, why not?

R12A	Utility
"The program sells itself."	PG&E
"They don't know what they are doing."	PG&E
"We have a couple of people with advanced marketing degrees."	PG&E
"We have already been marketing for a long time. We know what works, and we know what doesn't."	PG&E
"I think we are pretty successful. I teach how to sell green"	SCE
"We already have a specific marketing plan we are trying to implement."	SCE

### Sub-contracting

SC1. Do you sub-contract the rebate application paperwork to another entity?

SC1	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes			
No	2	5	7

SC2. Do you sub-contract any part of the BPI energy assessment out to another entity?

SC1	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes			
No	1	4	5
Not applicable	1	1	2

SC2A. If yes, why?

Not applicable to any respondent.

SC2B. Which portion of the BPI energy assessment is contracted?

SC2B	Utility
“Creating the energy pro file. The field work is done in house, the data is collected, but a subcontracted HERS rater makes the EnergyPro file.”	PG&E

SC2C. Is this for all jobs, advanced and basic package alike?

SC2C	Utility
“Never done a basic package.”	PG&E

SC3. Do you sub-contract installation of any of the possible retrofit measures to another entity?

SC3	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	5	7
No			

SC3A. If yes, why?

SC3A	Utility
"We focus on other aspects of the job, and roofing takes away from that."	PG&E
"Don't have enough capacity ourselves, an pricing."	SCE
"Windows and roofing have a different set of general liability requirements, which would put us in a premium insurance bracket"	SCE
"Small company mostly focused on energy testing."	SCE
"Workload"	SCE
"We don't have a c-20 license. It is cost effective to do it for HVAC. Anything where they need to pull a permit, they get a sub. Insulation is cost prohibitive because of the equipment involved."	SCE
"We are not trained as roofers, and the liability is too much. Windows are not our core competency."	SCE

SC3B. Which measures are contracted out? (Multiple answer)

SC3B	PG&E (n=2)	SCE (n=5)	Total (n=7)
HVAC		3	3
Lighting		2	2
Painting			
Windows	1	5	6
Doors	1	1	2
Roofing	2	5	7
Insulation	1	3	4
Plumbing		2	2
Other (Specify)			

SC4. Who pulls the permits for the jobs, when needed?

SC4	PG&E (n=2)	SCE (n=5)	Total (n=7)
General	1	4	5
Specialty contractors	1	1	2

### EnergyPro

E1. Do you think EnergyPro covers the major opportunities for energy efficiency?

E1	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes		2	2
No	2	3	5

## E1A. If not, why not?

E1A	Utility
“We wish pool pumps would be on there.”	PG&E
“They are not missing, but it isn't weighted correctly. Attic insulation is not done correctly, lighting is lacking, pool pumps are incorrect. It is a compliance tool, not a building tool”	PG&E
“Variable speed pool pumps were excluded, but contractors were still required to model pools and spas, but now there has been guidance to exclude it from the baseline.”	SCE
“There are not enough options, especially in the Alternatives Tab. We can't model variable speed pool pumps, which has large savings. There are base load issues...there are many base load items that we can't model. It often won't hold changes when closing and re-opening. If I send a file from one computer to another, it will calculate different savings. We would like to see heating without air conditioning, even though Title 24 required both, that often isn't the case. Also, it doesn't model the water heater insulation blanket.”	SCE
“It is a disaster. It is designed for new construction, which isn't what we are doing. The way that homes were built over the last 100 years has different components.”	SCE
“Hydronic heating systems are not modeled. Windows are limited. Modeling multiple HVAC systems are hard. Split level sare hard.”	SCE

## E2. Do you think EnergyPro is accurate in its estimates?

E2	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	1	2	3
No	1	3	4

## E2A. If not, why not?

E2A	Utility
“It doesn't show up in actual bills. That is a common complaint, and we have to explain it.”	PG&E

"There is no way to judge that. The baseline is not based on actual usage. For example, many don't use their HVAC as much as the "average" home, so their baseline is actually lower than what is said in Energy Pro. Also, the default for air leakage is very, very low, especially for those in older homes. Those homes are penalized by not receiving credit for those potential savings."

SCE

"Not sure, since we don't have post-install usage data. The numbers are never accurate, because we can't accurately model the home. Few will achieve the reductions provided by EnergyPro."

SCE

"It is hard to determine efficiencies, so it is the best tool we have seen. I'm assuming it is correct, but can't be sure."

SCE

"It leaves things out. It doesn't allow us to do LED lights. They are in Home Depot, but I can't get a rebate for them. EnergyPro is really designed for new construction. Also, EnergyPro is a monopoly. There is no motivation for them to get LEDs in 6 months ago when we were screaming for them."

SCE

"It can be manipulated incorrectly very easily to overestimate savings even though you entered the actual measures installed. It depends how it's entered."

SCE

### E3. What do you think are the main pros and cons to using EnergyPro?

E3

Utility

"You can show what the effect of the changes will be. We use ReCurve to create a report to show to the homeowner. It includes pictures and homeowners can see what is going on."

PG&amp;E

"They are not missing, but it isn't weighted correctly. Attic insulation is not done correctly, lighting is lacking, pool pumps are incorrect. It is a compliance tool, not building tool"

PG&amp;E

"The baseline is not based on actual usage. For example, many don't use their HVAC as much as the "average" home, so their baseline is actually lower than what is said in Energy Pro."

SCE

"It is hard to determine efficiencies, so it is the best tool we have seen. I'm assuming it is correct, but can't be sure."

SCE

"It is a disaster. It is designed for new construction, which isn't what we are doing. The way that homes were built over the last 100 years has different components."

SCE

"It can be manipulated incorrectly very easily to overestimate savings even though you entered the actual measures installed. It depends how it is entered."

SCE

### E4. Does your company use any other software programs to model estimated energy usage outside of the EUC program?

E4

Utility

"ReCurve"	PG&E
"ReCurve, it gives good estimates, and it makes an easy-to-understand proposal for the customer. Now our own in-house software for bidding."	PG&E
"Treat" has limitless ability to model base load. The report is also better. It is user friendly after training."	SCE
"ReCurve, TREAT, E-Quest."	SCE
"Yes. Manual D and Manual J for HVAC	SCE

### Customer Sales/Marketing

CS1. Has your company been actively promoting the program to new or existing customers?

CS1	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	5	7
No			

CS1A. If not, why not?

Not applicable to any respondent.

CS1B. If so, please describe who you have been promoting the program to.

CS1B	Utility
"Energy Efficient Mortgage's targeted to new home owners, but also current home owners"	PG&E
"Our website. Part of the Whole Neighborhood Marketing Pilots in Palmdale and Diamond Bar. Gone to EUC sponsored events. Green Home realtor training. Offered free energy assessments as a promotion, as well as a pricing promotion. Handouts and flyers.	SCE
"Palmdale Pilot Program...a Whole neighborhoods approach through LA county. We also promote the LA County Multifamily pilot program."	SCE
"Flyers, emails, EE City sponsored events	SCE
"Event attendees, normal customers."	SCE

CS2. What marketing has your company done to get customers interested in a EUC retrofit?

CS2	Utility
"Web, newspaper, billboard advertising, Billboards and door-to-door didn't seem to work. Word of mouth. Green-up parties: we host a party at a recent customer's	PG&E

home and talk about EE."	
"It is all word of mouth. We are in the Whole Neighborhood program and that has not worked at all. What works for us is small seminars and small groups, and individual word of mouth. The EUC is selling a rebate, not home performance..those leads are all tire-kickers, and don't understand what they are getting the rebate for. They should have sold Home Performance, not the Rebates."	PG&E
"Our website. Part of the Whole Neighborhood Marketing Pilots in PalmDale and Diamond Bar. Gone to EUC sponsored events. Green Home realtor training. Offered free energy assessments as a promotion, as well as a pricing promotion. Handouts and flyers."	SCE
"Vehicles are wrapped with EUC Cal verbiage. Local events. Home Makeover contest. Visited CPUC and CEC to talk about the program. ACI event in Los Angeles. Active in EUC training and planning."	SCE
"Flyers, emails, EE City sponsored events, our newsletters."	SCE
"PPT presentation, brochures, flyers. Events, co-op with LA."	SCE
"EUC kickoff events in several cities. We leverage the event by also hosting a workshop about the program. We do an Energy Party after a successful project we invite neighbors to hear a presentation and take a tour. We do the EUC road show (OSS, the EUC yellow van, ents, raffle off an audit, hand out coupons, usually done at the home of a satisfied customer). Open houses for our jobs. We go to events, including Energy Champion events. Flyers and brochures."	SCE

## CS3. What sales tools do you use to present information to prospective customers?

CS3	Utility
"The audit report. The rebate is helpful to upsell and sell measures together."	PG&E
"DOE information. The EUC has now developed a flyer that we like, and we use that...it is not pushing the rebate, but rather home performance and comfort."	PG&E
"Explaining the program on the phone, which has been challenging because it is a lot of information to take in. Walk them through the problem areas within the house. Talk to them face-to-face about priorities, and explain the various program options.	SCE
"Our website, and the estimate form on our website. Follow up emails and telephone calls. On site, out auditors have an easy time because it has already been sold on the phone and over email. The audit is never given away, so once they are invested in the audit, they are likely to go through with it. A thorough report, with lots of pictures."	SCE
"Flyers provided by EUC. Flexpath flyers"	SCE
"PPT presentation, flyers, brochures"	SCE
"Flyers, workshop presentations, open house tours. We leveraged the cooperative marketing for that. Also our website. Table covers, banners, wrapped vehicles."	SCE

CS4. What types of messages seem to motivate customers to get the work done? Is there a combination of messages that is especially effective?

CS4	Utility
"1st Rebate, 2nd Comfort, 3rd saving money on high energy bills"	PG&E
"Home Performance and Comfort is the lead, then the rebate is an extra opportunity. If you can sell home performance, the EUC program comes along with it. Not the other way around."	PG&E
"Return on investment is first. Cost and how much rebate they will get. Comfort and safety are nice, but secondary. The problem is you don't know how much the rebate amount will be until after you do the assessment."	SCE
"Let the homeowner get to know us and the program, build trust. Take them through the testing. A thorough report, with lots of pictures. Also, we are clear up front that we are not there just to do the audit, we really want to do a retrofit. We are very clear about the program and how long it will take."	SCE
"Rebate potential, then lower utility bills."	SCE
"1st Comfort 2nd Rebates."	SCE
"We work in a small geographic area that have "green" early adopters. We emphasize the assessment and use it as a teaching tool to lead into the one-stop" solution to stop energy waste. For example, you can install a 1.5 ton air conditioner instead of a 5 ton, but only if you use a Whole House approach. In a temperate climate you should be able to be comfortable for 10-20 cents per square foot per year. People who have \$300-\$400 utility bills per month are convinced by that. We focus on standard equipment that is tested and requires little maintenance, so we don't push trackless water heaters or sola-thermal, which helps ROI. We also stress comfort as part of the ROI."	SCE

CS5. Have you used other programs in combination with EUC to help sell the job?

CS5	Utility
"CHF (but that is over), Tri-Valley challenge, and the Stockton Energy Challenge"	PG&E
"LA County programs."	PG&E
"LA County programs. Single measure utility rebates (Burbank, Pasadena, LDWP), Flex Path."	SCE
"SCE Flex path"	SCE
"LA County Programs, HERS rebate, Manufacturer rebates, our own incentives."	SCE
"LA County. CalCerts HERS audits are subsidized and can be used for a lead off for an EUC audit. Financing through Matador, and used to use CHF. The city of Clairmont has Clairmont Home Energy Retrofit Project (CHIRP) meets every other week, and they offer a city incentive and city events."	SCE

CS5. What do you think are the best ways to engage customers about participating in the program?

CS5	Utility
“1st Rebate, 2nd Comfort, 3rd saving money on high energy bills.”	PG&E
“Explaining the program on the phone, which has been challenging because it is a lot of information to take in. Walk them through the problem areas within the house.	SCE
Talk to them face-to-face about priorities, and explain the various program options.”	
“Let the homeowner get to know us and the program, build trust. Take them through the testing. A thorough report, with lots of pictures. Also, we are clear up front that we are not there just to do the audit, we really want to do a retrofit. We are very clear about the program and how long it will take.”	SCE
“Free home walkthrough before a test in, along with a more in depth conversation.	SCE
“REF[sounds like he doesn’t want to give away sales secrets]”	SCE
“We work in a small geographic area that have “green” early adopters. We emphasize the assessment and use it as a teaching tool to lead into the one-stop” solution to stop energy waste. For example, you can install a 1.5 ton air conditioner instead of a 5 ton, but only if you use a Whole House approach. In a temperate climate you should be able to be comfortable for 10-20 cents per square foot per year. People who have \$300-\$400 utility bills per month are convinced by that. We focus on standard equipment that is tested and requires little maintenance, so we don’t push tankless water heaters or sola-thermal, which helps ROI. We also stress comfort as part of the ROI.”	SCE

CS6. Have any customers come to you inquiring about the program?

CS6	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	5	7
No			

CS6A. Where do your customers typically hear about the program?

CS6A	Utility
“Online.”	PG&E
“the EUC website, some is in the Whole House neighborhood program (related to another program). The leads from the website are not likely to translate into a retrofit HP job.”	PG&E
“Bill insert or letter from utility.”	SCE

"EUC website, our website, events."	SCE
"EUC website, or radio or TV promotion."	SCE
"Word-of-mouth, then some sort of flyer in their bill or surfing the internet."	SCE
"Our truck has an EUC wrap. Our website, via Yelp or Angie's List. We do Search Engine optimization, so many people see our web presence."	SCE

CS7. In your opinion, what types of advertising or marketing are the most effective in generating customer interest in EUC?

CS7	Utility
"Radio or TV"	PG&E
"Bill insert or letter from utility."	SCE
"Homeowners have done their research and gone online. The overall marketing has not been consistent enough to penetrate. They do it in big blasts, then months without anything. To communicate a new WH view, it has to be consistent. It also helps to have local community partners, faith based groups, etc. Those relationships are important, not just adds from the top down. It has to be consistent and coming from lots of different sources."	SCE
"EUC website is cited most often. Many have seen ads online."	SCE
"Customer referral. Convert a satisfied customer into word-of-mouth referral. We give gift certificates out at the end of a job and tell them to give it to their friends.	SCE
We have an energy party at a customer's house. These are the most effective."	SCE

CS8. About what percentage of your leads come from the EUC website, and about what percentage from other sources (referrals, local advertising, etc)?

CS7	Utility
"very few"	PG&E
"40%"	SCE
"70%"	SCE
"Less than 10%"	SCE
"Used to have a significant amount, but 3 months ago it dropped off. Now it is less than 15%"	SCE

CS8. On average, about how many customers do you contact before you are able to complete one energy assessment?

CS8	PG&E (n=2)	SCE (n=5)	Total (n=7)
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2	1	1
3	1	1
4		
5	2	2
6	1	1
Don't know	1	1
Other: "The Sanoma County money (through ABAG) offered free assessments, and everyone was jumping on that, but after that it dried up. However, a bunch of people came in from outside that shouldn't even be in this business, and there was a lot of bad information floating around." – SCE contractor		

## CS4. Would audit subsidies help close a retrofit sale?

CS4	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	4	6
No		1	1

## CS4. If yes, why?

CS4	Utility
"CHF did that, and it definitely helped"	PG&E
"100% subsidized is bad, but 50%, or a rebate is good."	PG&E
"We had coupons from LA county for a while, and that increased the # of jobs."	SCE
"There are two things happening. 1) The homeowner has no idea how intense the program is, even if it is explained, so they don't understand the value, which means the cost seems high. 2) If we could really sell them on the audit, there is a better chance that that customer show is after one single measure won't go to the bargain contractor due to WH sticker shock."	SCE
"A test and be a few hundred dollars or more, with another one after the job is over, that takes some of their rebate away. We have gotten a \$300 voucher from EUC and that has helped."	SCE
"The audit is not a sales tool. It is a diagnostic. The more people that make that a sales tool, you dilute it and it isn't real. I like a rebate, because it helps my margins, but if you give it away for nothing they value it with as nothing."	SCE
"Yes, though we want the homeowner to realize how much work goes into an energy assessment. It take 10-12 hours for the scheduling, the assessment, the reports, etc. "Free" means it is not worth anything and is just for sales."	SCE

CS9. On average, about how many customers do you contact before you are able to complete one retrofit?

CS9	PG&E (n=2)	SCE (n=5)	Total (n=7)
1 – 5	2		2
6 – 10		3	3
11 or more		1	1
Don't know		1	1

CS10. On average, how many days pass from your first contact with the customer and completion of the retrofit?

CS10	Utility
"Depends"	PG&E
"60"	PG&E
"A few months. People shop around, some just sit on it, some are waiting for financial circumstances to change."	SCE
"30-45"	SCE
"60 days"	SCE
"3 months"	SCE

CS10A. How about from first contact to completing the energy assessment?

CS10A	PG&E (n=2)	SCE (n=5)	Total (n=7)
1 week	1		1
1 week – 2 weeks	1	4	5
Don't know		1	1

CS10B. Following an assessment, what is the average number of days you spend in the customer's home to complete installation work?

CS10B	Utility
"60 hours, 8 hours a day"	PG&E
"7-10 days"	PG&E
"1 week"	SCE
"2 to 3 weeks"	SCE
"1-3"	SCE

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“3 weeks”

SCE

**Customer Participation Barriers & Drivers**

CB1. What do you think keeps customers from participating in the program?

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CB1

Utility

“Money. Just being able affords the work. A lack fo financing. We try not to d an assessment unless there is a possibility of moving forward.”

PG&amp;E

“Funds”

SCE

“There are two things happening. 1) The homeowner has no idea how intense the program is, even if it is explained, so they don't understand the value, which means the cost seems high. 2) If we could really sell them on the audit, there is a better chance that that customer show is after one single measure won't go to the bargain contractor due to WH sticker shock.”

SCE

“The audit cost is sometimes a barrier. A lot of customers don't know how much money the rebate is going to be til I the test-in, so that uncertainty is a barrier. A lot of people also expect that the rebate will cover the whole retrofit, and are disappointed. We have to do a lot of explaining that this is more forgetting work done on your house, not just paying for your HVAC or windows. The time that it will take to get the rebate back is a problem too. People don't feel like it is worth their time. Also, since everything has to be verified by a 3rd party, they have to take a lot of time off of work for test in, verification, test out, and verification forth test out. That is 4 days out of their work schedule just to fill the program requirements.”

SCE

“They thought it was free, because people have heard about utility programs that put free windows in, or similar.”

SCE

“Cost is prohibitive even with rebates. Some are not convinced that WH is the way to go. They don't feel like comfort or utility bills are enough of a concern. Many people don't know if thy will be in their house long enough for ROI. Some people are do-it-yourselfers and might qualify for the Basic package, but we don't do those.”

SCE

CB2. What do you think keeps customers from participating in getting retrofit work done after the energy assessment?

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CB2

Utility

“They want to show around. They go with a contractor who is less expensive because they are not BPI certified. Some are do it yourselfers. The most often is cost.”

PG&amp;E

“Money. Financing is a problem, even if it is just 5000”

PG&amp;E

“Lack of financing.”

SCE

“Some contractors are selling themselves against the program, even though they

SCE

don't have any clue how to do the modeling or to do the work right."

"The audit cost is sometimes a barrier. A lot of customers don't know how much money the rebate is going to be til I the test-in, so that uncertainty is barrier. A lot of people also expect that the rebate will cover the whole retrofit, and are disappointed. We have to do a lot of explaining that this is more for getting work done on your house, not just paying for your HVAC or windows. The time that it will take to get the rebate back is a problem too. People don't feel like it is worth their time. Also, since everything has to be verified by a 3rd party, they have to take a lot of time off of work for test in, verification, test out, and verification forth test out. That is 4 days out of their work schedule just to fill the program requirements."

SCE

"Cost"

SCE

"Upfront cost is too much, it is not enough of a priority at the moment. It is not the financing. Most customers we have in our area are better off and well educated, to they tend to be cash customers. There are fewer than 5 people who have even asked about financing. Also many people have a new expensive measure (like an HVAC) that is already a sunk cost, and they don't want to invest more even though it wasn't really done "right" in the first place."

SCE

### CB3. Do you have any ideas as to how the program can get these customers to move forward?

CB3

Utility

"Higher rebates"

PG&amp;E

"Offer easy financing."

SCE

"Educate about WH, and subsidize audit to make audits more attractive than cut-rate contractors."

SCE

"The biggest obstacle is waiting for verification. Taking time off of work and delaying the job really makes people hesitate. The cost for the Test-in and Test-out should be offset to attract more clients."

SCE

"I would love to see the program based more on delivered efficiency instead of modeling. There was a pilot in northern California that rewards customers based on before-after actual performance. Predictive modeling is less certain, and customers are not as confident that this model will be real after such a significant investment. It also means that the rebate is tied to the modeling that is done, which takes months to process, rather than using before-after bills which would be easier to process and to make it clear to the customer."

SCE

### CB4. What do you think motivates customers to participate in the program?

CB4

Utility

"Comfort, health, and energy savings."

PG&amp;E

"Rate of return"	SCE
"Rebate. Also comfort (it is too hot or too cold), and knowing that it can be improved through the EUC program. Many other are looking for a specific measure, like windows or HVAC, and are looking for a rebate."	SCE
"Comfort then rebates"	SCE
"They have been convinced of the value through word-of-mouth as well as our audit. and have the available cash flow."	SCE

CB5. We understand that these projects are typically expensive for a customer. How do you think program-based financing could best be structured to make customers more likely to proceed with the job after an assessment?

CB5	Utility
"CHF was perfect. It as easy, and it took all the steps necessary when you are retrofitting a home."	PG&E
"It should be in place for more than a month. There has been no consistency, which also make sth paperwork brutal."	PG&E
"Make it easy to qualify."	SCE
"The client's experience should be that a large amount of the cost for the test-in and test out should be provided by the program. Also, the LA County EUC program 2% financing is good, but it should be marketed more."	SCE
"LA County 2% is ok. It isn't good for me because they don't give me construction draws. I only do one of those a month. CHF was crazy. Do it like a construction loan and let the contractor take draws."	SCE
"Basedon actual savings, rather than modeling."	SCE

CB5A. Who would receive the financing? Contractor or customer?

CB5A	PG&E (n=2)	SCE (n=5)	Total (n=7)
Contractor	2	1	3
Customer		1	1
Both		1	1
Don't know		1	1
No answer		1	1

CB5B. What would be the terms?

CB5B	Utility
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“15 year”	PG&E
“Under 6%”	PG&E
“15 -Low. Easy to qualify.”	SCE
“LA County 2% financing is good.”	SCE
“Anything under 6% is good. 5 year”	SCE

## Conversion Rates

CR1. How many energy assessments have you done as part of the program so far?

CR1	PG&E (n=2)	SCE (n=5)	Total (n=7)
15 – 35		1	1
36 – 55	1		1
56 – 75		2	2
76 – 95			
96 +	1		1
Don't know		2	2

CR2. What percentage of these customers could qualify for program rebates if they installed the recommended measures?

CR2	PG&E (n=2)	SCE (n=5)	Total (n=7)
90%	1	2	3
100%		1	1
Don't know	1	2	3

CR3. Among those that would save enough to qualify, what percentage decided not to move forward with the retrofit?

CR3	PG&E (n=2)	SCE (n=5)	Total (n=7)
30%		1	1
50%		1	1
70%	1	1	2
Don't know		1	2
Other: “Very few”			

CR4. What do you think are the top three reasons customers decide not to move forward from the energy assessment to a retrofit?

CR4	Utility
"Lack of financing"	SCE

CR5. Approximately what percentage of energy assessments or audits turn into retrofits?

CR5	PG&E (n=2)	SCE (n=5)	Total (n=7)
30%		1	1
50%	1	1	2
95%		1	1
Don't know		1	1
No answer	1	1	2

CR5. Do you offer a free in-home walk-through, or try to get the homeowner to commit to the assessment at a cost?

CR5	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	1	3	4
No	1		1
Don't know		2	2

CR6. In the last 12 months, would you say that the number of energy assessments turning into retrofits is increasing, decreasing, or staying the same?

	PG&E (n=2)	SCE (n=5)	Total (n=7)
Increasing		1	1
Decreasing	1		1
Staying the same	1	2	3
Don't know		2	2

CR7. Why do you say that?

CR7	Utility
"(CHF went away)"	PG&E
"It peaked with the summer marketing blitz, but had to close after that. Putting a deadline on the rebates made people move."	SCE
"We only started near the end of 2010, so we were ramping up."	SCE

CB4. About what percentage of assessments don't go forward due to lack of financing. About how many jobs does this represent?

CB4	Utility
"80%"	PG&E
"40%"	PG&E
"Very few"	SCE
"5 to 10 jobs"	SCE
"20%"	SCE
"Based on actual savings, rather than modeling."	SCE

CB5. How do you think program-based financing would best be structured to help move assessments into retrofits?

CB5	Utility
"CHF was perfect. It was easy, and it took all the steps necessary when you are retrofitting a home."	PG&E
"Easy to qualify"	SCE
"LA County Matador program."	SCE
"LA 2% financing is good."	SCE
"LA County 2% is ok. It isn't good for me because they don't give me construction draws. I only do one of those a month. CHF was crazy. Do it like a construction loan and let the contractor take draws."	SCE

CB5A. Who would receive the financing? Contractor or customer?

	PG&E (n=2)	SCE (n=5)	Total (n=7)
Contractor	1	1	2
Customer		1	1
Both		1	1
Don't know		2	2

No answer	1	1
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CB5B. What would be the terms?

CB5B	Utility
“15 years”	PG&E
“Low. Easy to qualify.”	PG&E
“2-3%, easy to qualify for.”	PG&E
“LA 2% financing is good.”	PG&E
“Anything under 6% is good. 5 year”	SCE

PA8. Are you aware of Los Angeles County’s participation in the Energy Upgrade program?

PA8	SCE (n=5)
Yes	5
No	

PA8. Were you aware of the following LA County EUC program components before this call?

(Showing # that said “yes” to program components)	SCE and aware of LA County’s participation in the EUC program (n=4)
Additional incentives of \$1000-\$4000 on top of the utility incentives	5
Scholarships to reimburse you for training certifications	5
2% financing for homeowner energy upgrades	5
Regular program updates such as e-blasts and newsletters	5
TV, radio, and print ads drumming up homeowner demand	5

PA9. Have you heard of the “flex path”?

PA9	SCE (n=5)
Yes	5
No	

PA9-1. What do you know about it? How does it compare to the basic and advanced packages?

PA9-1	Utility
“\$1500 offered for a list of qualifying measures that have to add up to at least 100 points, two measures or more. I know the list of measures. It is compatible with area utility individual rebates.”	SCE
“All about it. We helped them to tweak it.”	SCE
“We are marketing it now, but haven't used it yet.”	SCE
“It makes a lot of sense. The EUC program is a long sales cycle. It is really easy for an HVAC guy to sell against the program. [Listen to Minute 34]”	SCE
“It is a point system. It is the opposite of actual efficiency. You might get more people participating but a lack of oversight in terms of quality will lead to the modeling not being correct.”	SCE

### Contractor Participation

CP1. Is there anything that [IOU] could do to help you asses more homes through the program?

CP1	Utility
“Offer financing.”	PG&E
“Subsidize assessments. It is a loss leader for us, and they still balk at the price.”	SCE
“Education. Sustained and consistent marketing. Subsidize audits. Emergency audits for those who contact us for a broken AC/Water heaters, etc.”	SCE
“Reduce and streamline the paperwork”	SCE
“Marketing has to be consistent. Send it out every time you can. Market change doesn't happen with 3 flyers, it happens with 12 months of consistent communication with the homeowner.”	SCE
“We love \$200 vouchers (could have been form LA County). That helped us a lot with selling audits. Anything that would facilitate us doing more jobs. Maybe subsidize wages for on-the-job trainees. Make the administrative aspects take less time, so we can spend more time in the field.”	SCE

CP2. Have you conducted a qualifying retrofit without filing for the EUC rebate?

	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	2	4
No			
Don't know		1	1
No answer		2	2

CP3. Do you know of any financing sources for customers?

CP3	Utility
"Just EE mortgages, but only for new homes"	PG&E
"GE, SKYPE, but it is expensive"	PG&E
"LA County. Another program available in Palmdale and San Bernadino that requires income qualification. One through GE. One through Utech"	SCE
"LA County 2% financing, Matadors"	SCE
"LA County 2%"	SCE
"LA County. CHF."	SCE

CP3A. If yes, do you refer customers directly to those financing sources?

CP3A	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	1	1	2
No		1	1
Don't know		2	2
Not applicable	1	1	2

CP3B. If yes, do you think this helps to sell the program?

CP3B	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	1	3	4
No			
Don't know		2	2
Not applicable	1		1

CP4. About how long does it take to receive final payment from the customer for a job after it is completed?

CP4	Utility
"2 weeks"	PG&E
"1 week, or up to 8 weeks if waiting for a rebate."	PG&E
"Immediately"	SCE
"1 week"	SCE

“Immediately”	SCE
“Immediately”	SCE

CP5. Do you currently float the rebate?

CP5	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes		2	
No	2	3	

CP5A. If yes, do you think this is helpful in recruiting customers to the program?

CP5A	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes		2	2
No	1		1
Don't know		1	1
Not applicable	1	1	2
No answer		1	1

CP5B. If no, would you do this if you had financing to help with it?

CP5B	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	2	
No		2	
Don't know			
Not applicable		1	

CP5C. Would you be interested receiving this kind of loan from [IOU]?

CP5B	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	2	4
No		2	2
Don't know			
Not applicable		1	1

CP5D. Do you think it would help with recruiting customers to be able to float the rebate (with financing)?

CP5D	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	1	4	5
No	2		2
Don't know		1	1

CP6. According to our records, your organization has completed a higher-than-average number of EUC Projects compared to other participating contractors. Why do you think that this is the case?

CP6	Utility
"We are BPI accredited, which customers are attracted to. We were part of the CHF , and now we focus on Energy Efficiency Mortgages. The company name is well known."	PG&E
"There are contractors in the program who sell against the program. They are in the program specifically to sell against it. Most of those are HVAC guys...you have to wait too long for you money...you have to make \$1000 per day per truck for HVAC. We are too aggressive to sign up contractors. The bottom third are not ever doing it. Make the strong stronger. Don't pander to the ones that are not interested.	SCE

## Market Effects

ME1. Did you learn any new job skills from the program?

ME1	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	2	4
No		1	1
Don't know		1	1
No answer		1	1

ME1A. If yes, what skills did you learn?

ME1A	Utility
"EnergyPro. It has improved our skills in other areas, because you have to pass so many standards to qualify.	PG&E

“Patience and paperwork”	PG&E
“Weatherization, Energy modeling”	SCE

ME2. Did you or your company hire additional employees as a result of the program?

ME2	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	4	6
No		1	1

ME2A. If yes, approximately how many new employees were hired?

ME2A	PG&E (n=2)	SCE (n=4)	Hired additional employees (n=6)
1 – 5		2	2
6 – 10	2	2	4
11 or more			
No applicable		1	1

ME2B. Did these employees receive EUC training (before or after they were hired)?

ME2B	PG&E (n=2)	SCE (n=4)	Hired additional employees (n=6)
Before	1	3	4
After		1	1
Both	1		1
Did not receive training			

ME2C. What is their expected duration of employment?

ME2C	PG&E (n=2)	SCE (n=4)	Hired additional employees (n=6)
2 months			

Permanent	2	4	6
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ME2D. Do you do the EUC work through a special department of your company, or is it an integral part of your operations?

ME2D	PG&E (n=2)	SCE (n=4)	Hired additional employees (n=6)
Special department		1	1
Integral	2	3	4

ME3. Are you or your company planning to add more staff as a result of program?

ME3	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	1	2	3
No	1	2	3
Don't know		1	1

ME3A. If yes, approximately how many are you planning to add?

ME3A	PG&E (n=1)	SCE (n=2)	Planning to add more staff (n=3)
2			
3			
4			
5 or more	1	1	2
Don't know		1	1

ME3B. Will these employees be EUC certified?

ME3B	PG&E (n=1)	SCE (n=2)	Planning to add more staff (n=3)
Yes	1	1	1
Maybe			
No			

Don't know	1	1
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ME3C. What is their expected duration of employment? (3 months, 6 months, etc.)

ME3C	PG&E (n=1)	SCE (n=2)	Planning to add more staff (n=3)
Permanent	1	1	2
Depends on jobs			
Don't know		1	1

ME4. Have you or your company had to lay off any employees as a result of a lack of demand for the program

ME4	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes			
No	2	5	7

ME4A. If yes, approximately how many were laid off?

Not applicable to any respondent.

ME6. Approximately how many energy assessments do you complete in an average month?

ME6	PG&E (n=2)	SCE (n=5)	Total (n=7)
7 – 12	1	2	3
13 – 18			
19 or more	1		1
Don't know		2	2
Not applicable	1		1

ME7. Would you say that the number of audits you complete are increasing or decreasing?

ME7	PG&E (n=2)	SCE (n=5)	Total (n=7)
Increasing		2	2
Decreasing	1		1
No change	1		1

Don't know	2	2
Not applicable	1	1

ME6. Would audit subsidies help close a retrofit sale?

ME6	Utility
"Yes. CHF covered them, and that really helped"	PG&E
"Yes. \$300 vouchers from EUC have already helped."	SCE
"Maybe. If you give something away free, people value it as zero."	SCE
"Yes. It already has."	SCE

ME8. Do you have a sense that in the next three months the number of audits you complete are going to increase or decrease, if at all?

ME8	PG&E (n=2)	SCE (n=5)	Total (n=7)
Increasing	1		1
Decreasing		2	2
No change			
Don't know		3	3
No answer	1		1

ME9. How many customers that purchased EUC rebated measures probably would have purchased the measures anyway if the program hadn't existed. Would you say ALL, MANY, SOME, or NONE?

ME9	PG&E (n=2)	SCE (n=5)	Total (n=7)
All			
Some	1	2	3
Many		1	1
None	3		3

ME10. Are customers generally installing the EUC rebated measures as part of larger retrofit or remodeling project?

ME10	Utility
"No"	PG&E

"About 40%"	SCE
"25% are doing a larger retrofit"	SCE

ME11. Have any of your EUC projects been inspected by anyone working for the EUC program?

ME11	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	1	2	3
No		1	1
Don't know	1	2	3

ME11A. If yes, what, if anything, did you learn through the inspection process?

ME11A	PG&E (n=1)	SCE (n=2)	Inspected projects (n=3)
Yes	1	2	3
No			
Don't know			

ME11B. What, if anything, have you applied or will you apply to subsequent projects that you learned about through the inspection process?

ME11B	Utility
"CAS testing"	PG&E
"Test-in procedures and what they look for."	SCE
"Various. Something new every month"	SCE
"Asbestos protocol and specific EUC program requirements. Specific paperwork or rebate requirements. We have had conflicts with RHA, usually we are correct, but sometimes not."	SCE

### Program Satisfaction

I'm going to ask you a series of questions that are intended to determine your satisfaction with the EUC program.

PS1A. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Communications with the utilities about program requirements?

PS1A	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – Not at all agree	1		1
1			
2		1	1
3			
4		1	1
5			
6		2	2
7		1	1
8			
9			
10 – Completely Agree			
Don't know	1		1

PS2A. Why do you give that rating?

PS2A	Utility
"We communicate with GIG, bit not PG&E"	PG&E
"E, it is all through administrators like Build it Green."	PG&E
"It is hard to get a response. Particular people we have a connection with are good, but there are so many consultants you don't know who to go to for what issue."	SCE
"You find out things at the worst time...after we have submitted it. Things are not consistent, and there is back and forth. They are behind."	SCE

PS1B. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Communications with local government about program requirements?

PS1B	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – Not at all agree	1		1
1			
2			
3			
4		1	1
5		1	1
6			
7		1	1
8		1	1

9	1	1
10 – Completely Agree		
Not applicable	1	1

PS2B. Why do you give that rating?

PS2B	Utility
"Have not had any	PG&E
"Haven't seen it. No one in the county or City in Sonoma knows about this.	PG&E
"Same. It is hard to get a response. Particular people we have a connection with are good, but there are so many consultants you don't know who to go to for what issue."	SCE

PS1C. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: The paperwork requirements for the program?

PS1C	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – Not at all agree	1	1	2
1			
2			
3			
4		2	2
5		1	1
6			
7			
8	1		1
9			
10 – Completely Agree			

PS2C. Why do you give that rating?

PS2C	Utility
"They keep changing it, it is confusing, the people reviewing don't know what is going on. The transitions between CBPCA and BIG is bad. Takes too long."	PG&E
"Too much"	SCE
"Lots of back and forth, takes too long. Redundant, not user friendly."	SCE

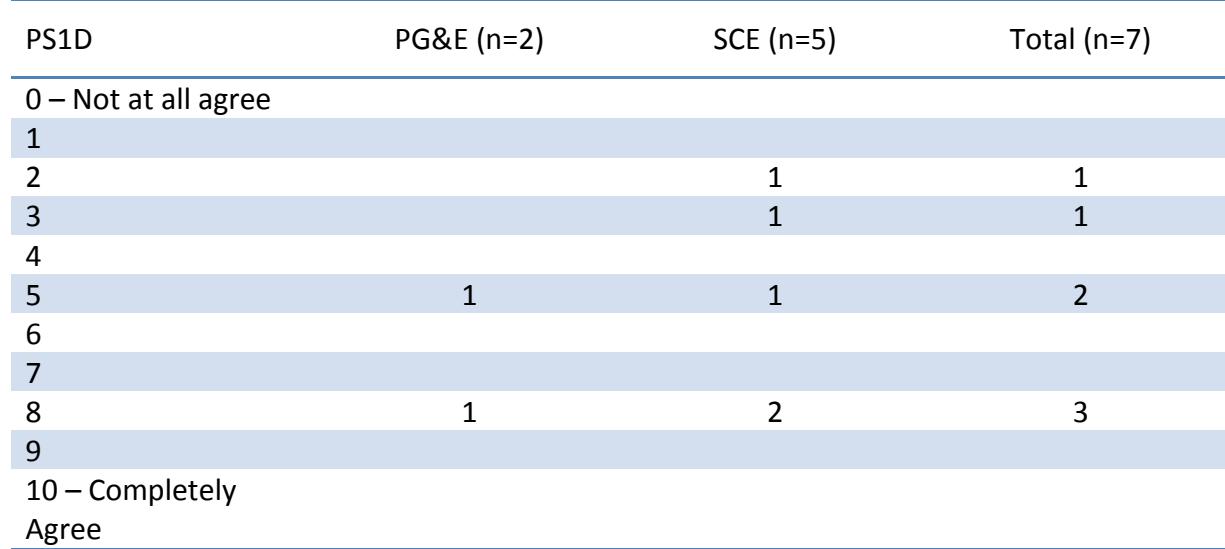
"It is more of a cost for a contractor to have to do the paperwork and train people and hire people to do that paperwork."

SCE

"It's a nightmare. You shouldn't be allowed to have a 3rd party do the paperwork, because that means you don't understand the job"

SCE

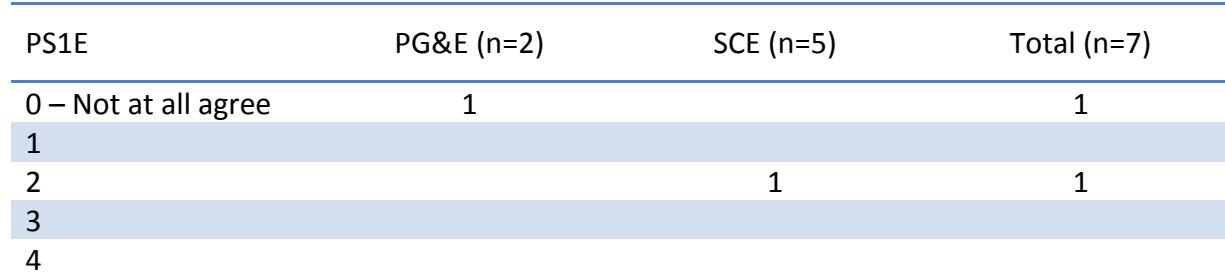
PS1D. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: The Energy Pro modeling software?

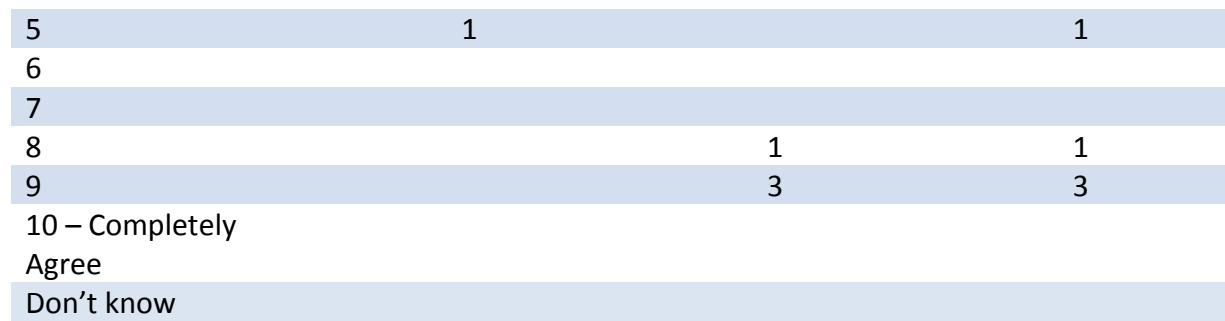


PS2D. Why do you give that rating?

PS2D	Utility
"Not very accurate. See previous."	SCE
"See previous answers"	SCE

PS1E. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Marketing support from the local government whose jurisdiction you most often work?

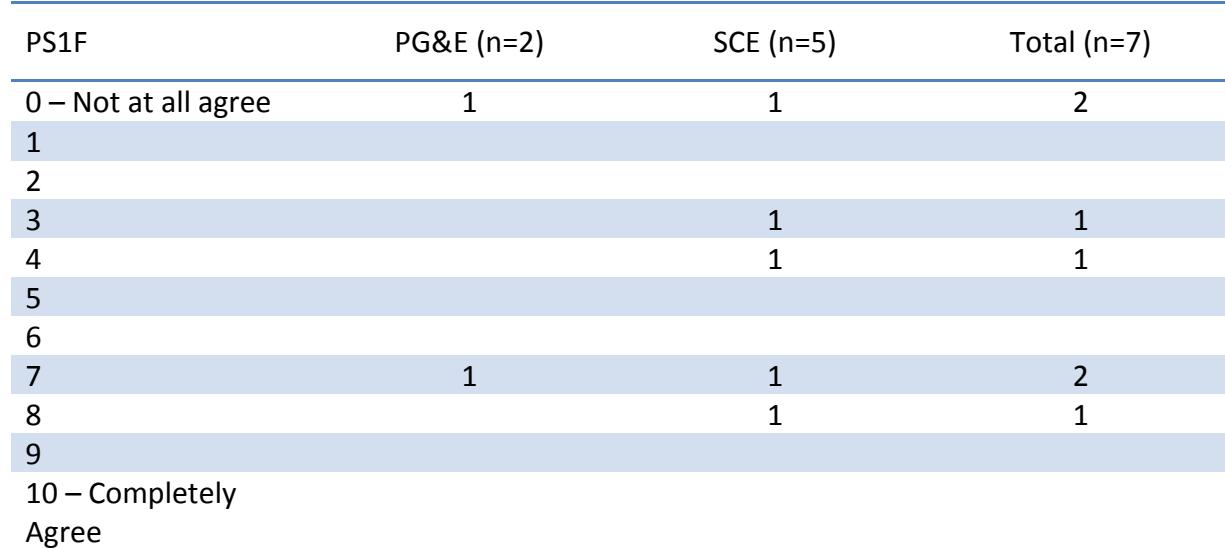




PS2E. Why do you give that rating?

PS2E	Utility
"Haven't seen any."	SCE
"They have co-op marketing, which is good, but there is not consistent enough, and hasn't been successful. It is overwhelming and confusing to the homeowner. We got zero leads from the home makeover contest."	SCE

PS1F. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Marketing support from the utility?



PS2F. Why do you give that rating?

PS2F	Utility
"It is almost nonexistent. PG&E's website doesn't even mention this."	PG&E

"They haven't spent much on it so far. Haven't seen anything that looks effective.

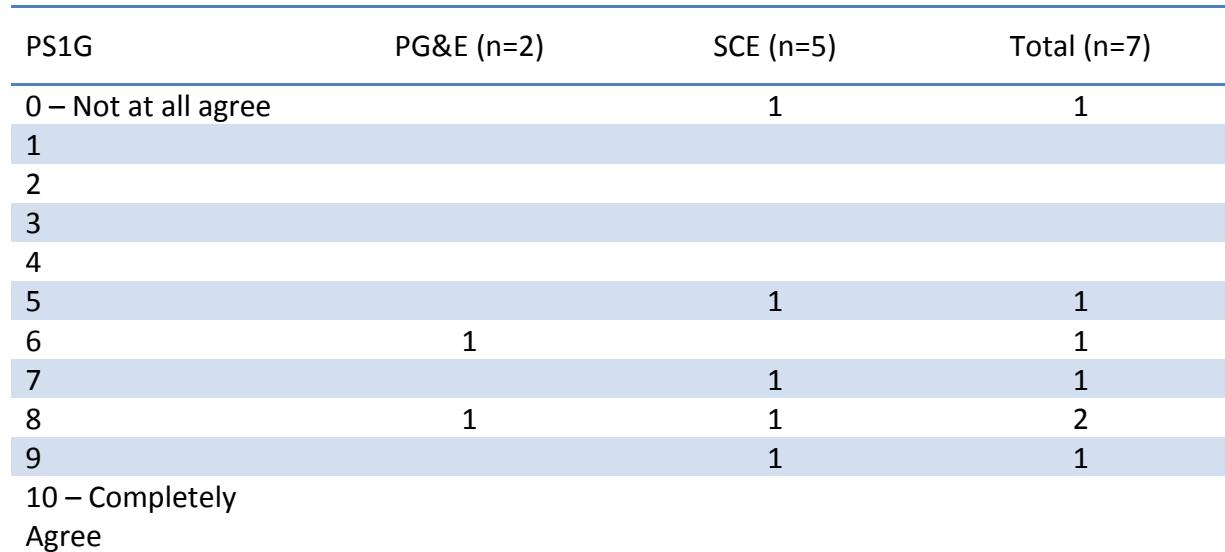
SCE

None of our jobs came through them."

"I didn't know there was any"

SCE

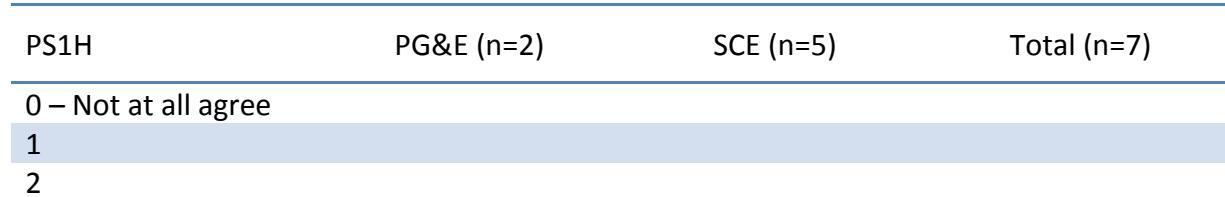
PS1G. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Training offered by the program?



PS2G. Why do you give that rating?

PS2G	Utility
"They keep changing the programming, so you have to keep going to different classes and webinars."	PG&E
"I don't see good work happening. A 9 day program with only 2 days in the field is not beneficial.	SCE
"They have to do training on the contractor's schedule, not the instructor's schedule.	SCE

PS1H. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Program incentives?



3	1	1
4	1	1
5	1	1
6	1	1
7		
8	1	1
9	1	1
10 – Completely Agree	1	1

PS2H. Why do you give that rating?

PS2H	Utility
"There is no communication with PG&E."	PG&E
"Without the county incentives, people won't move forward."	SCE
"It's too light. \$4000 isn't enough."	SCE

PS1I. On a scale from 0 to 10, where 0 means “very dissatisfied” and 10 means “very satisfied”, how satisfied have you been with: Additional local government incentives

PS1I	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – Not at all agree	1		1
1			
2			
3			
4			
5	1		1
6			
7		1	1
8		1	1
9		2	2
10 – Completely Agree		1	1
Don't know			

PS2I. Why do you give that rating?

PS2I	Utility

"They changed it. The ABAG thng was confusing. It is hard enough to explain it to customers an dlook liike experts when we have to go back and ask about it. Then it lasts for 2 months and is gone and we have to do something different again." PG&E

PS1.J. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Program measure installation requirements

PS1J	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – Not at all agree			
1			
2		1	1
3			
4			
5		1	1
6	1	2	3
7		1	1
8			
9			
10 – Completely Agree	1		1

PS2.J. Why do you give that rating?

PS2J	Utility
"The requirements are based on Energy Pro, which isn't any good. Air sealing the attic makes tremendous difference, but it isn't ranked highly enough."	SCE
"It can't be cookie cutter, because every home is different."	SCE

PS1.K. On a scale from 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied", how satisfied have you been with: Program overall?

PS1K	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – Not at all agree			
1		1	1
2			
3			
4	1		1
5			

6	2	2
7	2	2
8	1	1
9		
10 – Completely Agree		

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PS2K. Why do you give that rating?

PS2K	Utility
“Quality assurance is top-heavy, and the paperwork is oppressive. There is little chance to be profitable, especially without the LA county incentives.”	SCE

PS3. What would you say are the positive features of the program overall?

PS3	Utility
“Rebates.”	PG&E
“If we keep streamlining it, it can be successful. There is motivation to fix it, and it could be good.”	SCE
“Promoting EE. Bringing awareness to customers. Most of these homes could benefit from most of the required measures.”	SCE
“I understand what the goal is”	SCE

PS4. What would you say are the biggest problems of the program overall?

PS4	Utility
“It is hard to communicate with PG&E, both for us and the customers.”	PG&E
“Complexity, and frequently changing standards.”	SCE
“QI/QC it cumbersome and takes too long, as does the paperwork. Energy Pro is not very accurate, and the measures are based on Energy Pro.”	SCE
“Paperwork. Fluidity of the process. You should be able to upload your JRT into EnergyPro, or vice versa. It takes a long time, which eats into the profit margin.”	SCE
“I feel like it is design more for the program manager than it is for the contractor”	SCE
“Red Tape. Based on modeling, and not actual realized savings, like a pay-for-savings pilot program that happened in Northern California”	SCE

PS5. How do you feel about local government's involvement in the program overall?

PS4	Utility
“They aren’t really involved.”	PG&E
“LA County EUC has done a good job.”	SCE
“LA County incentives are great, but their marketing is poor.”	SCE
“Great.”	SCE
“They are a little bit better. It has focused my energy there.”	SCE
“Great”	SCE

PS6. How can the program make the rebate process easier/faster for you?

PS6	Utility
“SMUD has link that lets people check on the progress of their rebate.”	PG&E
“Sometimes we don’t hear from the program for 3 or four weeks. This should be faster, because on big jobs we often have to wait before we can even start. It is difficult to get to the person who actually has the answers. We just got assigned anew program manager, so we will see how that goes.”	SCE
“1) Needs a fast-track for competent contractors. 2) Eliminate QI for Test In...provide pictures and info instead of waiting for a TI that wastes time. 3) Emergency Approval for quick change out of measures, for broken AC, water heaters, etc. 4) Low interest rate financing for the customer that is quick and easy. 5) Contractors should not be in charge of the energy modeling. It isn’t their scope of work. Use a 3rd party. 6) subsidize the initial audit.”	SCE
“reduce paperwork, reduce number of contacts necessary. Reduce the audit and test-in and test-out requirements so the customer doesn’t have to take a minimum of 4 days off of work.”	SCE
“My costs are \$800 to process everything (modeling, going back and forth with RHA, etc). That’s about 25% of that possible rebate is going ot my overhead increase in the EUC program.”	SCE
“Make it basedon actual savings, not modeling.”	SCE

## Program Design

PD1. What do you see as the strengths of the basic upgrade package of the program?

PD1	Utility
“Haven’t done any. They always qualify for the larger package.”	PG&E
“We don’t do basic-package jobs.”	SCE
“it is good to have the option, but they can do those measures themselves and not worry about the test-in and test-out”	SCE

"Actively avoided that. It doesn't pencil out, it is ridiculous. It could be great for Progressive for blow-and-go, but I make the whole house better, and Basic doesn't" SCE

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PD2. What do you see as the weaknesses of the basic upgrade package?

PD2	Utility
"Haven't done any. They always qualify for the larger package."	PG&E
"It isn't cost effective. The amount of time it takes to educate the consumer and do the audit, it isn't worth it for \$1500. It isn't even really home performance."	PG&E
"Most people who qualify for the basic package qualify for the advanced package."	SCE
"We don't do basic-package jobs."	SCE
"Only about 5% are Basic, but most clients are looking to big dollar items like HVAC or windows."	SCE
"Actively avoided that. It doesn't pencil out, it is ridiculous. It could be great for Progressive for blow-and-go, but I make the whole house better, and Basic doesn't"	SCE
"Profit margin is low, and most do not qualify."	SCE

PD3. Could the basic upgrade package be improved in any way?

PD3	Utility
"If you do three measures, you are qualified for the other program. I don't see any need."	PG&E
"We don't do basic-package jobs."	SCE
"it is good to have the option, but they can do those measures themselves and not worry about the test-in and test-out"	SCE
"Actively avoided that. It doesn't pencil out, it is ridiculous. It could be great for Progressive for blow-and-go, but I make the whole house better, and Basic doesn't"	SCE

PD4. What do you see as the strengths of the advanced upgrade package of the program?

PD4	Utility
"Even if you just get 15% you still get \$1500."	PG&E
"It works"	PG&E
"We don't do basic-package jobs."	SCE
"A bigger rebate. Most of our customers are already looking for bigger ticket items like HVAC and windows."	SCE
"I wouldn't try to sell all of the Adv. Measures to customers without the program, so many people who would just get one or two end up getting all of them."	SCE

PD5. What do you see as the weaknesses of the advanced upgrade package?

PD5		Utility
“You could have rebates just for one measure.”		PG&E
“The marketing message has been wrong. Don’t change it every 3 or 4 months.”		PG&E
“We don’t do basic-package jobs.”		SCE
“Houses often can’t get to 40% if they have some measures already. Give us \$4000 at 30%, because the EUC goal is a 30% reduction.”		SCE

PD6. Could the advanced upgrade package be improved in any way?

PD6	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	1	2	3
No			
Don’t know		2	2
No answer	1		1
Other: “We don’t do basic-package jobs.” – SCE contractor			

PD6A. If yes, how?

PD6A		Utility
“You could have rebates just for one measure.”		PG&E
“We don’t do basic-package jobs.”		SCE
“Reduce paperwork”		SCE
“Houses often can’t get to 40% if they have some measures already. Give us \$4000 at 30%, because the EUC goal is a 30% reduction.”		SCE

PD7. Would you prefer to use software other than EnergyPro for modeling?

PD7	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes		2	
No	1	2	
Don’t know		1	
Other: “TREAT, and Manual D’s but the cost is very expensive, so we have internal software. I’m not interested in learning anything new that isn’t already approved by the CEC.” – PG&E			

contractor

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PD7A. If yes, what?

PD7A	Utility
“TREAT”	SCE
“ReCurve, TREAT”	SCE

### Inter Contractor Conversation

ICC1. Have you talked to other contractors outside of your company about the EUC program?

ICC1	PG&E (n=2)	SCE (n=5)	Total (n=7)
Yes	2	5	7
No			

ICC1A. If yes, what is the nature of those conversations?

ICC1A	Utility
“The review process...there are multiple people reviewing. They are not on the same page...one person says this and this are wrong, you send it back and the next person finds other things that the first people didn’t find.”	PG&E
“Efficiency first meets on a monthly basis. We made a rule not to talk about the program, because it turns into a bitch session. Marketing is bad, and there is no flood of clients, the paperwork cuts into profits, changing the requirements has been nightmare that requires new forms and new time consuming classes.”	PG&E
“We are part of the Efficiency first SoCal chapter. They have bi-weekly calls, often with utility and/or LA County rep. It is complex, things are still in flux. It is tough to know what the status of a job is. Every job has to go through third party QA (RHA), which adds on days to each job (it used to a spot-check).”	SCE
“Paperwork, rebate delays. 1) Needs a fast-track for competent contractors. 2) Eliminate QI for Test In...provide pictures and info instead of waiting for a TI that wastes time. 3) Emergency Approval for quick change out of measures, for broken AC, water heaters, etc. 4) Low interest rate financing for the customer that is quick and easy. 5) Want to not be in charge of the energy modeling. It isn’t their scope of work. Use a 3rd party. 6) subsidize the initial audit.”	SCE
“Time it takes to go from auditing to retrofitting, the time it takes for the appeal	SCE

process when they question your results. It is an ongoing process that can takes months for us to get done with a client. All that time cost more money.

"How long it takes to get things though the program."

SCE

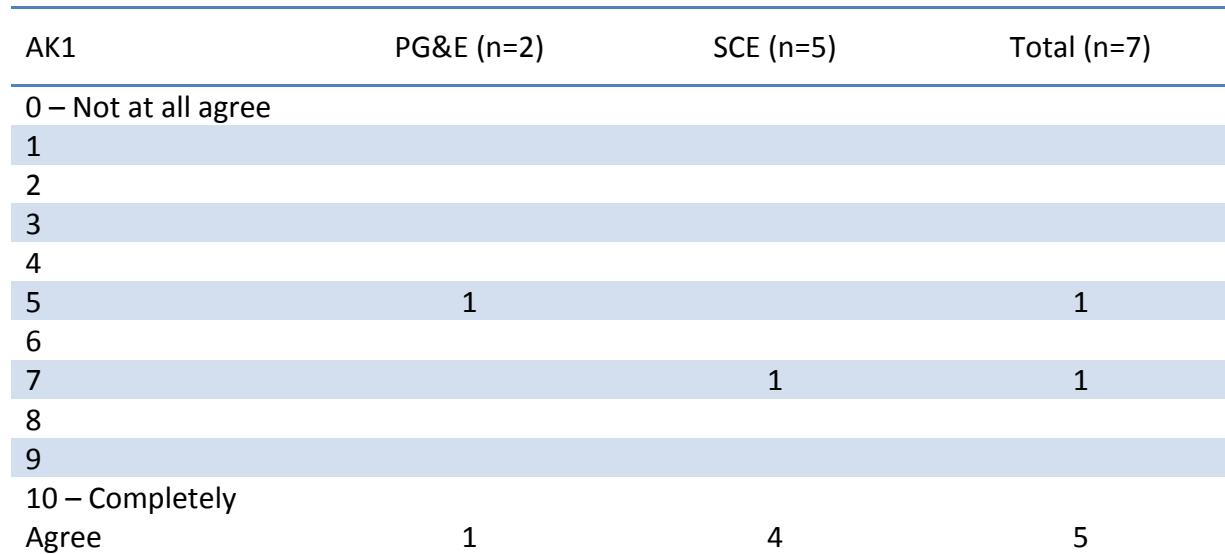
"Sharing best practices, how to streamline the JRT, logistical tips on how to work within the program. Everyone complains about the paperwork, though I realize that there has to be paperwork. I'd prefer it to be based on actual savings, but working with what we have every contractor needs more support for helping the customer experience less bureaucracy. There are some cases where the application reservation process period is a few weeks, and that kills the customer momentum and makes them afraid that they will have to jump through red-tape. We can deal with red-tape if we have to, but shield the customer from it."

SCE

## AKA-B

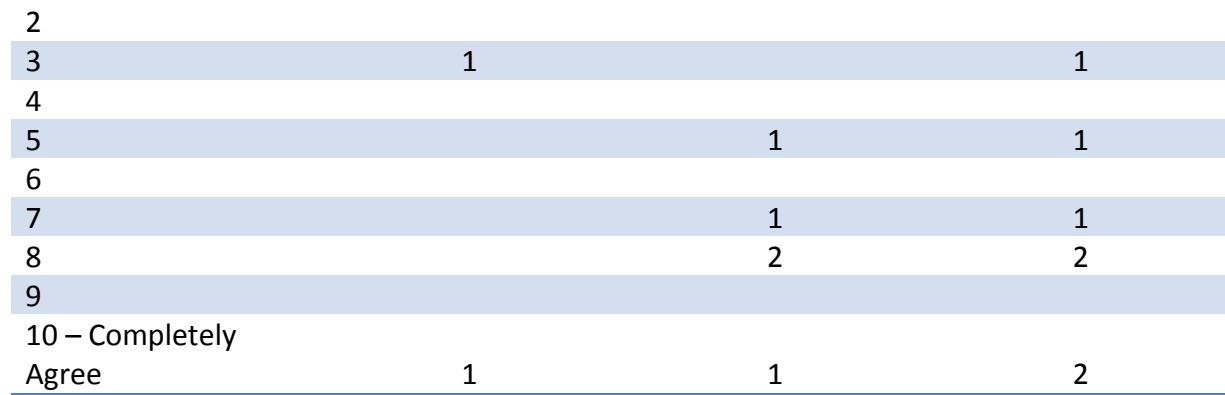
I'm going to read a few statements. Using a scale of 0 to 10 where 0 means Not at all agree, and 10 means Completely agree, please tell me how much you agree with each statement.

AK1. The comfort of a home that has sealing around windows and doors, insulated walls and attics, insulated hot water systems, and all high-efficiency appliances would be significantly greater than that for a home without these features.

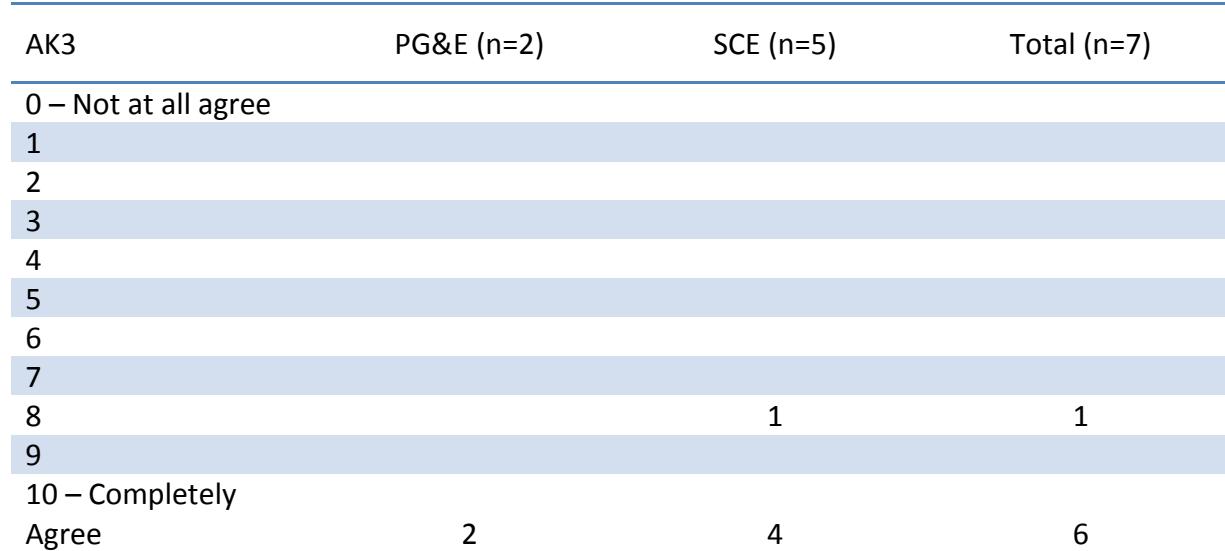


AK2. The energy costs of a home that has these features would be significantly less than one that does not.

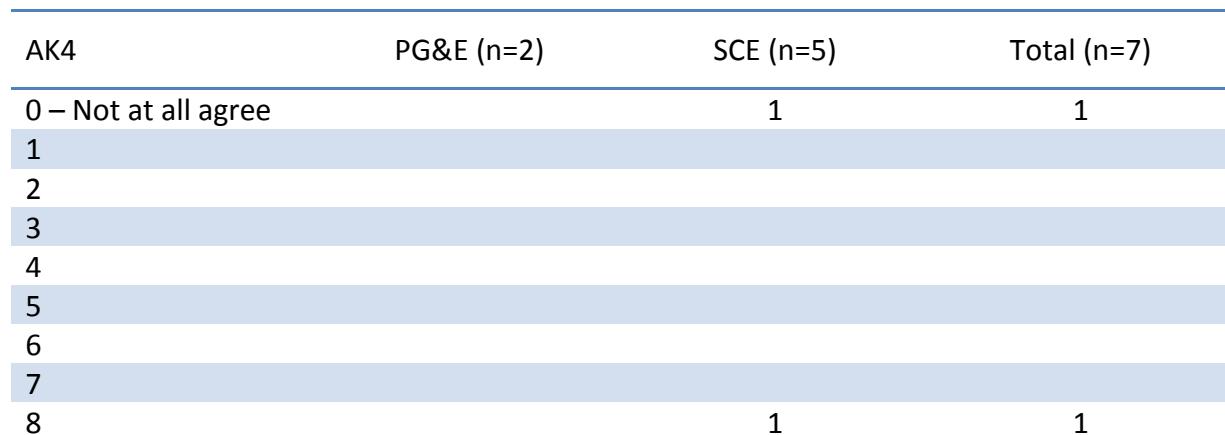




AK3. Household electricity use has an impact on the environment.



AK4. I am concerned that global climate change will increase if homeowners do not make their homes more energy efficient.





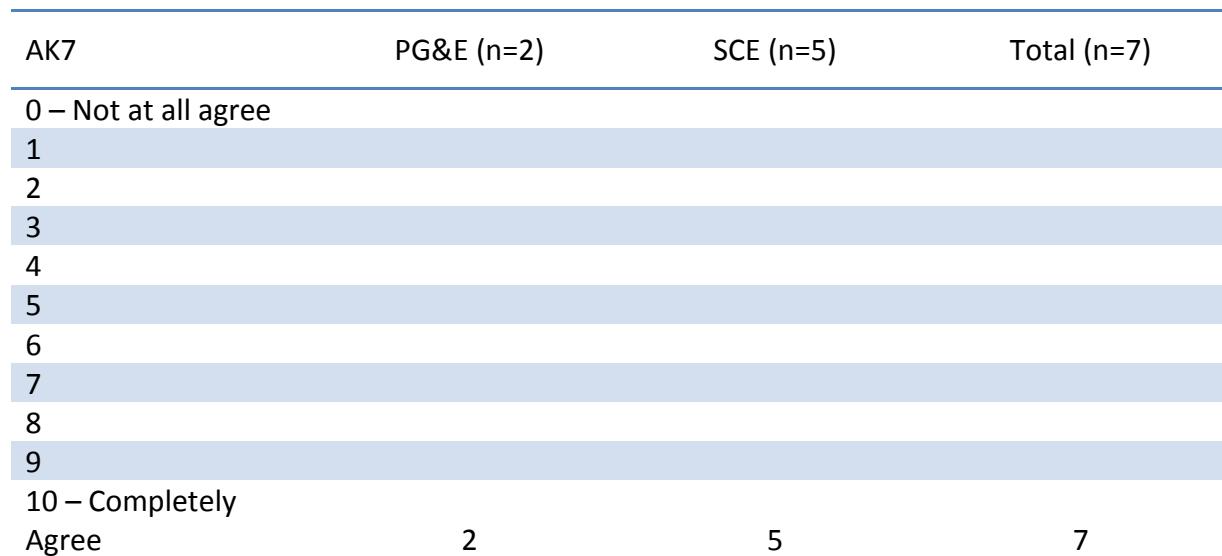
AK5. It is my responsibility to highlight the potential financial savings that can result from energy assessments and retrofits to my customers.

AK5	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – Not at all agree		3	3
1		1	1
2		1	1
3			
4	1		1
5			
6			
7			
8			
9			
10 – Completely Agree	1		1

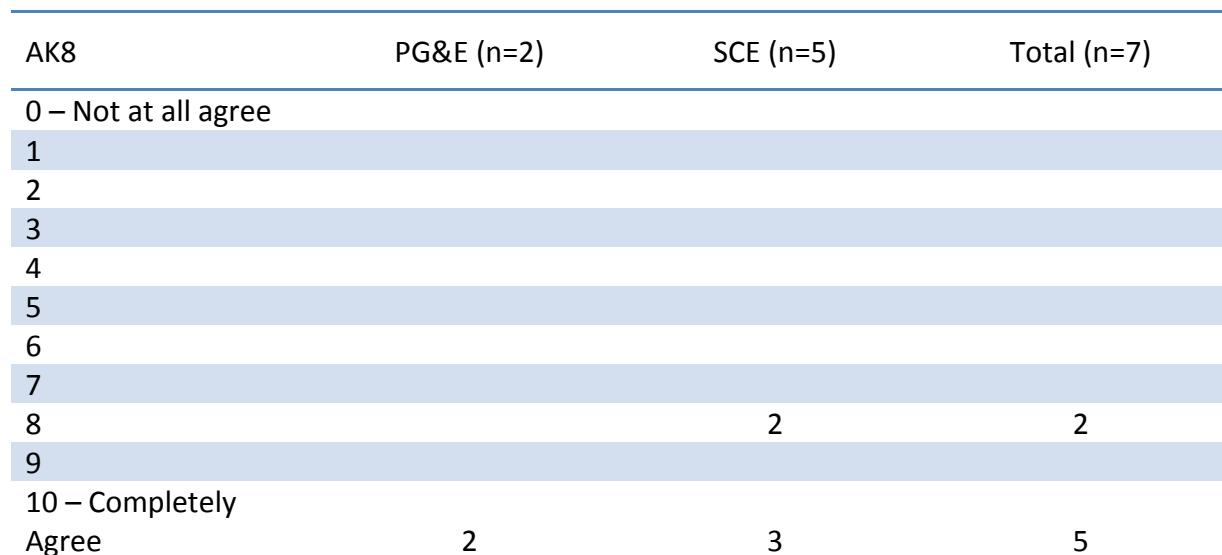
AK6. It is not my responsibility to help the environment by encouraging my customers to save energy.

AK6	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – Not at all agree	1	3	4
1		1	1
2		1	1
3			
4	1		1
5			
6			
7			
8			
9			
10 – Completely Agree			

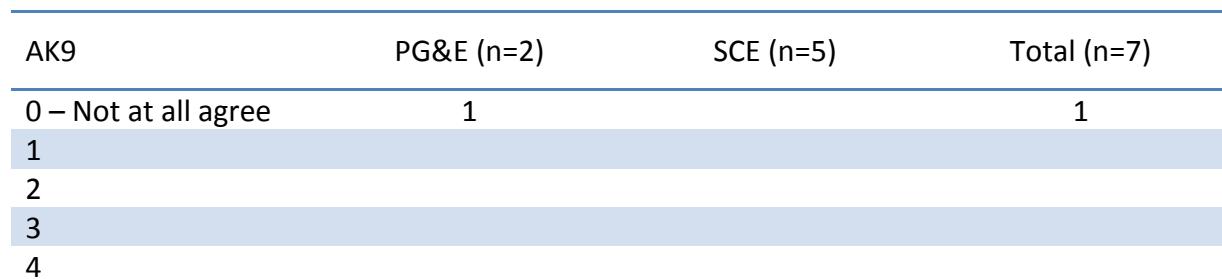
AK7. I intend to promote energy efficiency to my customers.

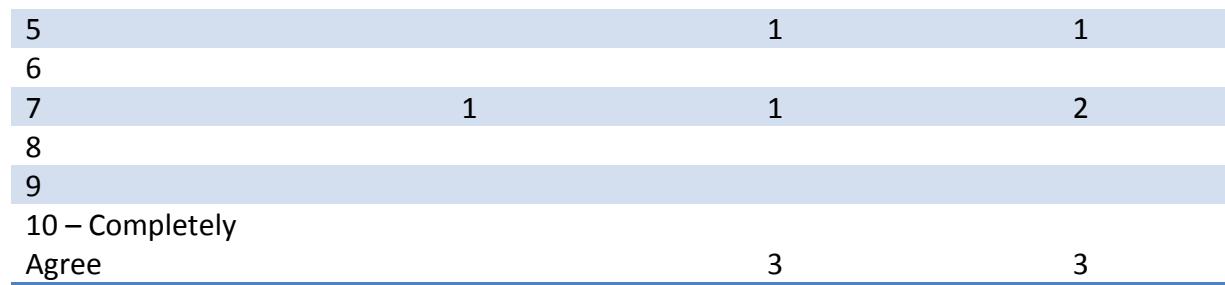


AK8. I very often encourage my customers to do a comprehensive retrofit of their homes to reduce energy use and increase comfort.

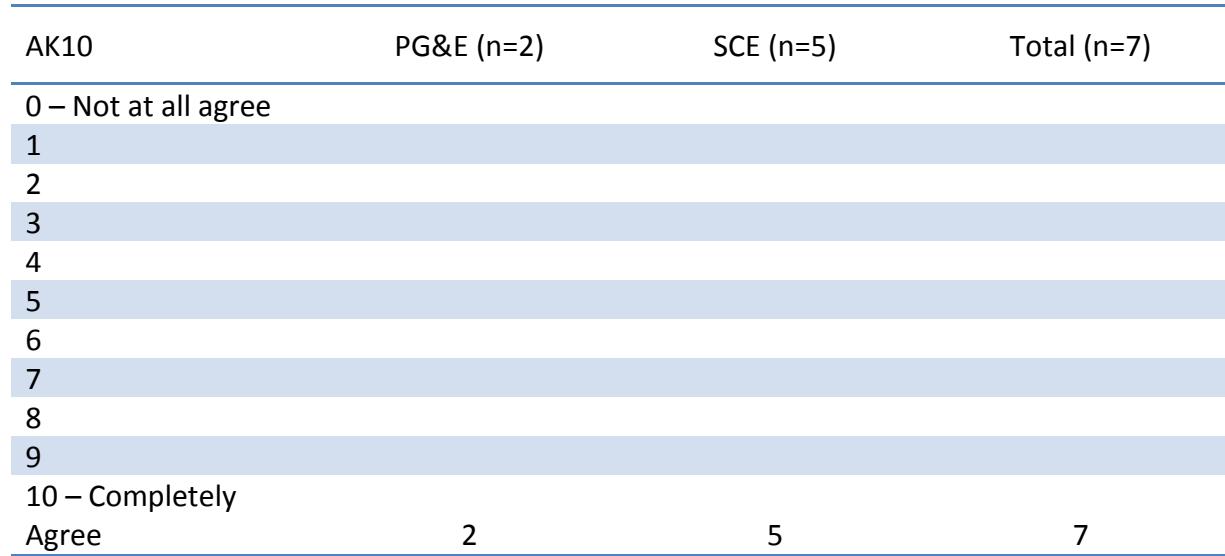


AK9. I often worry that the cost of energy for my own home will increase.

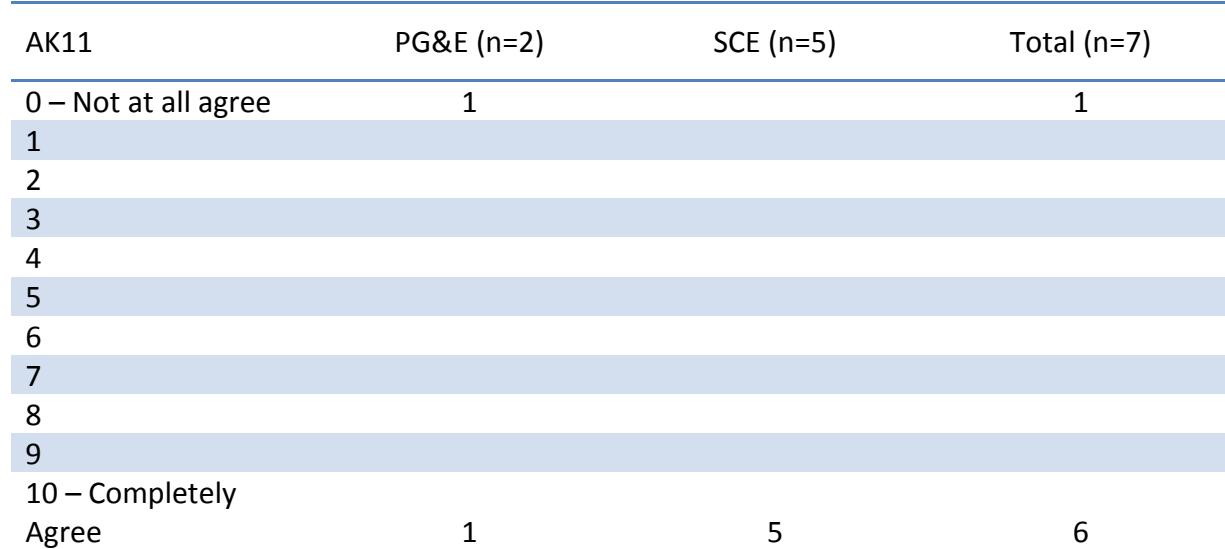




AK10. I am very concerned about how energy use affects the environment.



AK11. I have to take the lead in my own household if we're going to keep our utility bills down.



AK12. It is not my responsibility to use as little energy as possible to help the environment.

AK12	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – Not at all agree	1	3	4
1		1	1
2			
3		1	1
4	1		1
5			
6			
7			
8			
9			
10 – Completely Agree			

AK13 I intend to conserve on electricity consumption in my *own* home this summer.

AK13	PG&E (n=2)	SCE (n=5)	Total (n=7)
0 – Not at all agree			
1			
2			
3			
4			
5			
6			
7			
8			
9		1	1
10 – Completely Agree	2	4	6

### Closing

CL1. Those are all the questions I have. What else do you think we would want to know about your experiences with the program based on our conversation today?

CL1	Utility
“When customers call PG&E, PG&E customer service doesn't know about the rebates, so customers question if we are making it up. Also, when PG&E tries to	PG&E

schedule someone to go to a rebate recipient's house to do verification testing, the customer will ask "Is this in regards to my rebate?" and the PG&E representative doesn't know, which makes things difficult and they call the contractor to find out what is going on. Both the customer and I am out of the loop for 6 weeks or so after the rebate is applied for. SMUD has a link that gives progress on the rebate that is easy for the customer."

"The lack of consistency is the worst part. Half of the consultants running the program don't know what they are doing, and if they worked in the real world they would not have jobs. There is no way that small general contractor can get into this business and make money. You need 2-3 people, you need to train them, and get the equipment. Unless you cheat the system."

PG&amp;E

"EUC in LA county is doing a good job. They have been trying to use their funds well. The primary objective should be to increase rebates, subsidize assessments, and offer financing. EUC without LA county rebates doesn't seem to be enough to generate interest in other counties we work in. The person who has been doing a good job is Dan Flemming. He has been pretty responsive."

SCE

"Quality assurance takes a long time. There is a lot of back and forth that takes time. They tell us things that don't make sense, and have to fight with them about it, and that tall takes time. If someone needs a water heater tomorrow, they can't get them through EUC, and once they have that they are not motivated to participate in WH. I really feel that they are not using their funding appropriately in terms of the QI/QC program. It would be in the best interest of the program to provide the energy modeling service to the contractors, and let the contractors know what the customers will be receiving. There will be not back and forth arguing about the details. Also, be very selective about which contractors can participate in such an intense quality control program. Weeding out some of the ones who are not trained well, will take the burden off those who are and ensure more savings. However edison moves forward to the next level, brainstorming with longtime contractors is a must. Engage the contractor community, ask their advice, and there will be a much better chance of success."

SCE

"The amount of office paperwork required is hours and hours and hours. If they can minimize that, that would be huge. It would be promoted a lot more. It seems like a political process with a lot of hands and a lot of people that we have to deal with just for getting one homeowner in the program. This whole process takes a lot of time and money from us as a contractor. I think other contractors might start turning their back on the program because of this."

SCE

"BPI. I'm happy that BPI has used to a standard for testing, so we have consistency, but I think BPI is a little behind. It is not this program's responsibility to get every contractor...it needs quality contractors. BPI should help do that and have quality controls in their standards for contractors."

SCE

"RHA QA isn't very good. We have spent a lot of time and money correcting RHA's mistakes, even though they are supposedly doing the quality checks. Do it based on delivered efficiency, rather than modeling. An energy meter or smart meter can be cheap at scale, it would guarantee that we are dealing with real savings rather than

SCE

modeled savings, and allow less red tape. The money should be used better. Give out the money based on actual realized energy efficiency. That would cut out so much of the red-tape and consultants, etc.”

## 5. MARKETING EFFECTIVENESS SURVEYS

### 5.1. Survey Instruments

#### 5.1.1. Target Population

##### **Survey Introduction**

Thank you for your participation in this study. Your feedback is very important to PG&E. Before we begin the main survey, we have a few questions about your household to ensure that you qualify.

##### **Screeners**

X1. Is your household currently a customer of PG&E?

1. Yes
2. No [THANK & TERMINATE]
8. I don't know. [THANK & TERMINATE]

D3. Do you own or rent your home?

1. Own
2. Rent [THANK & TERMINATE]
00. Neither, please describe: \_\_\_\_\_ [THANK & TERMINATE]

D4. Which of the following types of housing units would you say best describes your home? Is it a..?

1. Single-family detached house
2. Single-family attached house (townhouse, row house, excluding duplex) [THANK & TERMINATE]
3. Duplex [THANK & TERMINATE]
4. Apartment building with 2 or more units [THANK & TERMINATE]
6. Mobile home or house trailer [THANK & TERMINATE]

D5. Does your home have central air conditioning?

1. Yes
2. No [THANK & TERMINATE]

D6. In what year was your home built?

1. After 1980 [THANK & TERMINATE]
2. 1971 to 1980
3. 1961 to 1970
4. 1951 to 1960

5. 1941 to 1950
6. 1940 or earlier

D17. Which of the following counties do you currently live in?

1. Contra Costa
2. Fresno
3. Placer
4. San Mateo
5. Santa Clara
6. None of these counties [THANK & TERMINATE]

D15. Which of the following best describes your current employment status?

1. Employed Full Time
2. Employed Part Time
3. Not Employed, Currently Seeking Employment
4. Not Employed, Not Seeking Employment
5. Retired
6. Student

D16. Which of the following best represents your annual household income from all sources in 2011, before taxes? Was it ...

1. Under \$75,000 [THANK & TERMINATE]
2. \$75,000 to \$99,999
3. \$100,000 to under \$124,999
4. \$125,000 to \$149,999
5. \$150,000 or more
9. Prefer not to answer [THANK & TERMINATE]

[IF D15 = 5, THEN D16 = 2, 3, 4 OR 5 TO CONTINUE; IF D15 <> 5, THEN D16 = 4 OR 5 TO CONTINUE]

### **Exposure to EUC Messaging**

Great! You qualify for our study. First, I have some questions about the types of media you may be exposed to.

US1. About how many hours per week do you . . .

- a. Watch TV [NUMERIC OPEN END, 0-99]
- b. Surf the Internet [NUMERIC OPEN END, 0-99]
- c. Listen to radio, not counting satellite radio [NUMERIC OPEN END, 0-99]

[IF US1b>0]

US2. Will you list 3 publicly accessible (for free) websites that you frequently (on a daily or weekly basis) go to? [OPEN END]

US3. How often do you read the newspaper (paper copy not online news)?

1. Every day
2. Four to six times per week
3. One to three times per week
4. Less than once a week
6. Never

EM2. Have you ever heard or seen the term “Energy Upgrade California”?

1. Yes
2. No

EM2aa. Have you ever seen any ads, displays, or handouts displaying this logo? [DISPLAY EUCLOGO.png]

1. Yes
2. No

[IF EM2 = 2 AND EM2AA = 2, SKIP TO MM2]

EM2a. Where did you first learn about Energy Upgrade California?

01. A contractor
02. Farmer's market or community event
03. Workshop or presentation at a library or community building
04. Internet ad
05. Email
06. Direct mailing to your home, by mail, or a door hanger
07. Radio ad
08. Television ad
09. Newspaper ad
10. Billboard or transit ad
11. Mentioned by family member, friend, co-worker or neighbor
00. Other, please describe: \_\_\_\_\_

ME3. Where else have you heard about Energy Upgrade California, if anywhere? Select all that you recall. (MULTIPLE RESPONSE, UP TO 7)

01. Contractor
02. Farmer's market or community event
03. Workshop or presentation at a library or community building
04. Internet ad
05. Email
06. Direct mailing to your home, by mail, or a door hanger

07. Radio ad
08. Television ad
09. Newspaper ad
10. Billboard or transit ad
11. Mentioned by family member, friend, co-worker or neighbor
00. Other, please describe: \_\_\_\_\_
96. Nowhere else

ME4. What does the phrase “Energy Upgrade California” mean to you? [OPEN END]

ME5. What do you think are the main reasons to sign up for the Energy Upgrade California program, if there are any? [OPEN END, 96 None]

{FIELD RESEARCH TEAM BACK-CODE – DO NOT SHOW LIST TO RESPONDENT}

1. Rebates or incentives
2. Saving money on utility bills
3. Saving energy
4. Better for the environment
5. Increased comfort
6. Better health/air quality in the home
7. Other (please define/describe): \_\_\_\_\_

### **Participant Project Status**

PR1. Have you signed up to get a home upgrade through Energy Upgrade California?

1. Yes
2. No

[ASK IF PR1 = 1, ELSE SKIP TO SM1]

PR2. Has a contractor come to your home to conduct an energy assessment to see if you qualify for incentives for home energy upgrades?

1. Yes
2. No

[ASK IF PR2 = 1, ELSE SKIP TO SM1]

PR3. What is the status of the home energy upgrades that you may receive an incentive for?

1. The work on my home is complete
2. The work is in progress
3. The work has not started yet
4. Not sure if I want to continue
5. Not sure if my home qualifies

[ASK IF D17 = 4]

SM1. Have you ever heard of the Energy Ambassadors program?

1. Yes
2. No

[ASK IF SM1 = 1, ELSE SKIP TO BAR1]

SM2. Have you signed up to participate in the Energy Ambassadors program?

1. Yes
2. No

SM3. How did you hear about the Energy Ambassadors program? Please select all that apply.

01. Contractor
02. Community event
03. Internet ad
04. Email
05. Direct mailing to your home, by mail, or a door hanger
06. Radio ad
07. Television ad
08. Newspaper ad
09. Mentioned by family member, friend, co-worker or neighbor
12. An Energy Ambassadors party you attended
00. Other, please describe: \_\_\_\_\_

[ASK IF SM2 = 1, ELSE SKIP TO BAR1]

SM4. Have you hosted any Energy Ambassador parties at your home?

1. Yes
2. No

[ASK IF SM4 = 1, ELSE SKIP TO BAR1]

SM5. Approximately how many total people have attended the Energy Ambassador parties at your home? [NUMERIC OPEN END]

## BARRIERS TO PARTICIPATION

[ASK PR1 = 2]

BAR1. Which of the following BEST describes why you haven't signed up for any home upgrades?

1. The initial cost is too high.
2. I haven't had time to contact a contractor.
3. I haven't found a contractor yet.

4. I need more information about the program.
5. My home doesn't need any of the upgrades sponsored by the program.
6. I cannot get financing to cover the project cost.
00. Other, specify: \_\_\_\_\_

[ASK IF BAR1 = 1, ELSE SKIP TO BAR3]

BAR2. Other than cost, are there any other reasons you have not yet signed up for any home upgrades? (MULTIPLE RESPONSE, UP TO 5)

2. I haven't had time.
3. I haven't found a contractor yet.
4. I need more information about the program.
5. My home doesn't need any of the upgrades sponsored by the program.
00. Other, specify: \_\_\_\_\_

BAR3. What could the program do to help you sign up for upgrades? [OPEN END] [96=Nothing]

### **Marketing Exposure Battery**

Now we have some questions about where you have heard about the Energy Upgrade California program.

#### **Level 1: Awareness: Mass Media Advertising**

MM1. Do you remember seeing, hearing or reading any advertisements during the past 12 months for the Energy Upgrade California program [IF EM2a or ME3 = 4 TO 10, READ IN: "other than those already selected"]?

1. Yes
2. No

[IF MM1 = 2 AND EM2A <> 4, 5, 6, 7, 8, 9, OR 10 AND ME3<>4, 5, 6, 7, 8, 9, OR 10, SKIP TO MM2]

MM5. Please tell me all the advertising slogans or messages you can recall for Energy Upgrade California. [OPEN END]

{FIELD RESEARCH TEAM BACK-CODE LIST – DO NOT SHOW LIST TO RESPONDENT}

1. "Insulate me! I'm drafty!"
2. "Up to \$4,000 in energy upgrade incentives"
3. "Don't miss the window"
4. "Did you know that if you do several home energy improvements at once you can achieve greater energy savings?"
6. "Take advantage of these great incentives today and find out about additional local government rebates."
7. "Reduce energy use. Save money. Create jobs."

8. “Incentives” (General)
9. “Lower bills” (General)
10. “Comfort” (General)
11. “Participating contractors” (General)
12. “The environment” (general)

MM7. Please name any organizations that you believe sponsor the Energy Upgrade California program. A best guess is fine. [OPEN END]

{FIELD RESEARCH TEAM BACK-CODE LIST – DO NOT SHOW LIST TO RESPONDENT}

1. PG&E
2. SMUD
3. SCE/SoCal Edison/Edison
4. SCG/The Gas Company/SoCal Gas
5. SDG&E
6. CPUC (California Public Utilities Commission)
7. State of California (general)
8. California Energy Commission
9. City government
10. County government
11. Sierra Club
12. Other utility or energy provider
13. Other non-profit
14. Other government organization
15. Local Contractor
98. (Don't know)

MM2. Do you recall seeing any of the following ads for the program ... [1 = Yes, 2 = No]

[ROTATE]

- a. [SKIP IF ME3 = 8 OR EM2a = 8] On TV? [EMBED: 1\_ENERGIZED ENG 30-no logos.mov]
- b. [SKIP IF ME3 = 7 OR EM2a = 7] On the radio? [EMBED: StopWaste.org\_H-House\_Radio\_30\_MIX\_042811.mp3]
- c. [SKIP IF ME3 = 9 OR EM2a = 9] In the newspaper? [SHOW: PRINTAD cleaned.GIF]
- d. [SKIP IF ME3 = 4 OR EM2a = 4] On the Internet? [SHOW: ONLINEBANNERAD.TIF]
- e. [SKIP IF ME3 = 10 OR EM2a = 10] On a billboard or transit ad? [SHOW: TRANSITAD1.jpg & TRANSITAD2.jpg]

[IF MM1 = 2 and MM2a-e = 2 and EM2a <>4, 5, 6, 7, 8, 9, or 10 and ME3 <>4, 5, 6, 7, 8, 9, or 10, SKIP TO EV1]

MM3. In general, what effect would you say the advertising you saw had on your interest in Energy Upgrade California Program? Did it affect you interest... ...

1. Positively

2. Negatively or
3. Did it not have an effect on your interest in the program

MM8. What changes, if any, could be made to Energy Upgrade California advertising to increase your interest in the program?

00. [OPEN END]
96. (None/No changes)
98. (Don't know)

## **Level 2: Education: Events/Workshops**

[SKIP EV1A IF EM2A =2 OR ME3=2, SKIP EV1B IF EM2A =3 OR ME3=3]

EV1. Energy Upgrade California has also had representatives share information at community events and also hosted workshops to promote knowledge about energy efficiency equipment and programs. Have you heard anything about the program... [1=YES, 2=NO] [ROTATE]

- a. At a community event such as a farmer's market or community event?
- b. At a workshop at a local library or municipal building?

[IF EV1A AND EV1B = 2, SKIP TO CM1]

(PROGRAMMER NOTE: SKIP TO CM1 ONLY if EV1A AND EV1B = 2.

IF EV1A = 1 and EV1b = 2, ASK EV2, SKIP EV3, ASK EV4 and EV5  
IF EV1A = 2 and EV1b = 1, SKIP EV2, ASK EV3, ASK EV4 and EV5  
IF EV1a = 1 and EV1b = SKIPPED and (EM2a=3 OR ME3 = 3), ask EV2-EV4  
IF EV1a = SKIPPED and EV1b = 1 and (EM2a=2 OR ME3 = 2), ASK EV2-EV4  
IF EV1a = SKIPPED and EV1b = SKIPPED and (EM2a=2,3 OR ME3 = 2 or 3), ASK EV2-EV40

[ASK EV2 IF EV1A=1 OR EM2A =2 OR ME3=2]

EV2. [IF ME3 = 2 OR EM2a = 2, READ-IN: "You mentioned that you heard about the Energy Upgrade California program at a farmer's market or community event."] At which farmer's markets or community event do you recall hearing about the program?

1. [IF COUNTY = CONTRA COSTA] Danville Farmers Market
2. [IF COUNTY = CONTRA COSTA] Diablo Valley Farmers Market
3. [IF COUNTY = CONTRA COSTA] San Ramon Farmers Market
4. [IF COUNTY = CONTRA COSTA] Pittsburg Farmers Market
5. [IF COUNTY = CONTRA COSTA] Orinda Farmers Market
6. [IF COUNTY = CONTRA COSTA] Martinez Farmers Market
7. [IF COUNTY = CONTRA COSTA] Walnut Creek Farmers Market
8. [IF COUNTY = CONTRA COSTA] The Concord GreenFEST
9. [IF COUNTY = CONTRA COSTA] The Walnut Creek FamilyFest
10. [IF COUNTY = CONTRA COSTA] The Walnut Creek Walnut Festival

11. [IF COUNTY = CONTRA COSTA] El Cerrito Farmers Market
12. [IF COUNTY = CONTRA COSTA] Brentwood Farmers Market
13. [IF COUNTY = CONTRA COSTA] Point Richmond Farmers Market
14. [IF COUNTY = CONTRA COSTA] The Concord Fall Home and Garden Show
15. [IF COUNTY = CONTRA COSTA] The Kaiser Farmers Market (Walnut Creek)
16. [IF COUNTY = FRESNO] Kerman Market
17. [IF COUNTY = FRESNO] Kingsburg Farmers Market
18. [IF COUNTY = FRESNO] Reedley Farmers Market
19. [IF COUNTY = FRESNO] Fresno Then and Now Show
20. [IF COUNTY = FRESNO] Big Fresno Fair
21. [IF COUNTY = FRESNO] Fresno Lowe's Table
22. [IF COUNTY = FRESNO] Fresno Chamber of Commerce
23. [IF COUNTY = FRESNO] Fresno Orchard Supply Hardware Table
24. [IF COUNTY = FRESNO] Fresno Council District 1 Engagement Meeting
25. [IF COUNTY = FRESNO] Fresno Council District 5 Engagement Meeting
26. [IF COUNTY = FRESNO] Fresno Council District 7 Neighborhood Canvas
27. [IF COUNTY = FRESNO] Fresno Fig Garden Area Neighborhood Canvas
28. [IF COUNTY = FRESNO] North Fresno Neighborhood Canvas
29. [IF COUNTY = FRESNO] Clovis Railroad Park Area Neighborhood Canvas
30. [IF COUNTY = FRESNO] Clovis Orchard Supply Hardware Table
31. [IF COUNTY = FRESNO] Clovis Farmers Market
32. [IF COUNTY = FRESNO] Clovis Advantage Trade Show
33. [IF COUNTY = SAN MATEO] San Mateo Green Fair
34. [IF COUNTY = SAN MATEO] San Mateo Home Garden and Gourmet Show
35. [IF COUNTY = SAN MATEO] Burlingame Farmers Market
36. [IF COUNTY = SAN MATEO] San Bruno Farmers Market
37. [IF COUNTY = SAN MATEO] San Mateo Farmers Market
38. [IF COUNTY = SAN MATEO] Pacifica Fogfest
39. [IF COUNTY = SAN MATEO] South San Francisco Farmers Market
40. [IF COUNTY = SAN MATEO] San Carlos Art & Wine Festival
41. [IF COUNTY = SAN MATEO] Menlo Park Farmers Market
42. [IF COUNTY = SAN MATEO] Redwood City Farmers Market
43. [IF COUNTY = SANTA CLARA] San Jose Downtown Farmers Market
44. [IF COUNTY = SANTA CLARA] San Jose Blossom Hill Farmers Market
45. [IF COUNTY = SANTA CLARA] San Jose Willow Glen Farmers Market
46. [IF COUNTY = SANTA CLARA] Sunnyvale Farmers Market
47. [IF COUNTY = SANTA CLARA] Saratoga Farmers Market
48. [IF COUNTY = SANTA CLARA] Cupertino Diwali –Festival of Lights
49. [IF COUNTY = SANTA CLARA] Los Altos Farmers Market
50. [IF COUNTY = SANTA CLARA] Los Gatos Farmers Market
51. [IF COUNTY = SANTA CLARA] San Jose Home Show
52. [IF COUNTY = SANTA CLARA] Cupertino Farmers Market
53. [IF COUNTY = PLACER] Auburn Farmers Market
54. [IF COUNTY = PLACER] Rocklin Farmers Market

55. [IF COUNTY = PLACER] Granite Bay Farmers Market
00. Other, please specify \_\_\_\_\_
98. Don't Know

[ASK IF EV1B=1, OR EM2A=3 OR ME3=3]

EV3. [IF ME3 = 3 OR EM2A = 3, READ-IN: "You mentioned that you attended a workshop about the Energy Upgrade California program."] Where was the workshop that you attended where you heard about the program?

1. [IF COUNTY = CONTRA COSTA] Danville Town Meeting Room
2. [IF COUNTY = CONTRA COSTA] El Sobrante Library
3. [IF COUNTY = CONTRA COSTA] Lafayette Library Learning Center
4. [IF COUNTY = CONTRA COSTA] Richmond City Council Chambers
5. [IF COUNTY = CONTRA COSTA] Orinda Community Center
6. [IF COUNTY = CONTRA COSTA] San Ramon Community Center
7. [IF COUNTY = CONTRA COSTA] Pittsburg City Council Chambers
8. [IF COUNTY = CONTRA COSTA] Moraga Public Library
9. [IF COUNTY = FRESNO] Greater Fresno Area Chamber of Commerce
10. [IF COUNTY = FRESNO] Veterans Memorial Building
11. [IF COUNTY = FRESNO] Fresno Fig Garden Library
12. [IF COUNTY = FRESNO] Fresno Sunnyside Library
13. [IF COUNTY = FRESNO] Fresno Woodward Park Library
14. [IF COUNTY = SAN MATEO] Half Moon Bay Library
15. [IF COUNTY = SAN MATEO] San Carlos Library
16. [IF COUNTY = SAN MATEO] Woodside Library
17. [IF COUNTY = SAN MATEO] South San Francisco Main Library
18. [IF COUNTY = SAN MATEO] Redwood City Library
19. [IF COUNTY = SAN MATEO] Pacifica Community Center
20. [IF COUNTY = SAN MATEO] San Mateo City Council Chambers
21. [IF COUNTY = SANTA CLARA] Milpitas Library
22. [IF COUNTY = SANTA CLARA] Sunnyvale Senior Center
23. [IF COUNTY = SANTA CLARA] San Jose Almaden Community Center
24. [IF COUNTY = SANTA CLARA] Saratoga Community Center
25. [IF COUNTY = SANTA CLARA] San Jose Rose Garden Library
26. [IF COUNTY = SANTA CLARA] Jewish Community Center of Silicon Valley
27. [IF COUNTY = SANTA CLARA] Cupertino Community Hall
28. [IF COUNTY = SANTA CLARA] San Jose Willow Glen Community Center
29. [IF COUNTY = SANTA CLARA] Los Altos Shoup Park Garden House
30. [IF COUNTY = PLACER] Auburn City Council Chambers
31. [IF COUNTY = PLACER] Loomis Town Hall
32. [IF COUNTY = PLACER] Loomis Depot Building
33. [IF COUNTY = PLACER] Rocklin Library
34. [IF COUNTY = PLACER] Auburn Library

00. Other, please specify \_\_\_\_\_

98. Don't Know

EM4. In general, what effect would you say your experience with the Energy Upgrade California representatives had on your interest in Energy Upgrade California Program? Did it affect your interest...

1. Positively
2. Negatively or
3. Did it not have an effect on your interest in the program

EV5. Did you learn anything new about the Energy Upgrade California program from the information you received at these events, either the community event or the workshop?

1. Yes
2. No [SKIP TO CM1]

EV6. What did you learn? [OPEN END]

### **Contractor Marketing**

[SKIP TO CM2 IF EM2A=1 OR ME3=1]

CM1. Do you remember hearing about or discussing the Energy Upgrade California program with a contractor?

1. Yes
2. No

[ASK IF CM1 = 1 OR EM2A=1 OR ME3=1, ELSE SKIP TO TP1]

CM2. [READ IN IF ME3 = 1 OR EM2a = 1: "You mentioned that you heard of the Energy Upgrade California program through a contractor."] How did the building contractor make you aware of the program? (MULTIPLE RESPONSE, UP TO 4)

1. Face-to-face discussion
2. Door hanger
3. A group talk or presentation
00. Other, please describe: \_\_\_\_\_

CM3. In general, what effect would you say the contractor had on your interest in Energy Upgrade California Program? Did it affect your interest...

1. Positively
2. Negatively or
3. Did it not have an effect on your interest in the program

CM4. Did you learn anything new about the Energy Upgrade California program from the information you got from the contractor?

1. Yes
2. No [SKIP TO P1]

CM5. What did you learn? [OPEN END]

### **Content Testing**

#### **Print Collateral Testing**

[ROTATE MODULES: P1-P6, L1-L4, L5-L8, P7]

TP1. Now, we would like to show you some of the Energy Upgrade California program's print advertising and ask a few questions about it. [IF EM2 = 2, READ IN: "Please answer the following questions even if you haven't seen these materials before."]

**TP1. Print:** Please review this advertisement and then answer the short series of questions that follow.

**[SHOW PG&E BROCHURE: PGE BROCHURE MERGED.GIF]**

P1. Have you seen this brochure BEFORE it was shown to you here?

1. Yes, I've seen this brochure
2. No

**[ASK IF P1=2]**

P2. Have you seen any advertisements similar to the brochure shown to you here (with the same logo)?

1. Yes
2. No

P3. [IF P1 = 2 AND P2 = 2, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this message is attempting to get you to do? [OPEN END]

P4. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this brochure, I would be likely to seek out more information on this topic.
- b. [IF PR1 = 1] The information in this brochure accurately reflects what I have experienced in the program.
- c. I understand the two types of upgrade packages presented in this brochure.

P5. Now I would like for you to review the information on panel 1 (highlight) of this brochure. Please read each of these five sections. Now, on a scale of 0 to 10 where 0 means 'not at all' and 10 means 'very much,' how much do each of these five sections make you want to participate in the Energy Upgrade California program? [0-10]

- a. Incentives
- b. Lower bills
- c. Comfort
- d. Participating contractors
- e. The environment

P6. And of these five sections, which one is MOST LIKELY to make you want to participate?"

- 1. Incentives
- 2. Lower bills
- 3. Comfort
- 4. Participating contractors
- 5. The environment

## LOCAL OUTREACH TESTING

[IF COUNTY = SAN MATEO, SHOW SMLOCALADMERGED.GIF,

IF COUNTY <> SAN MATEO, SKIP TO L3 AND L4]

L1. Have you ever seen this advertisement BEFORE it was shown to you here?

- 1. Yes
- 2. No

L2. Have you seen any other advertisements or handouts similar to the advertisements shown to you here (with the same logo)?

- 1. Yes
- 2. No

[ASK ALL]

SHOW SMLOCALADMERGED.GIF FOR L3 AND L4]

L3. Please look at the following informational handout. [IF L1 <> 1 AND L2 <> 1, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this handout is attempting to get you to do? [OPEN END]

L4. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this handout, I would be likely to contact the program.
- b. [IF SM1 = 1] The information in this handout accurately reflects what I have experienced in the program.
- c. I understand the information about the Personal Energy Review.
- d. I understand the information about becoming an Energy Ambassador. [IF COUNTY = CONTRA COSTA, SHOW CCLOCALAD.GIF,

**[IF COUNTY <> CONTRA COSTA, SKIP TO L7 AND L8]**

L5. Have you ever seen this advertisement BEFORE it was shown to you here?

- 1. Yes
- 2. No

L6. Have you seen any other advertisements or handouts similar to the advertisements shown to you here (with the same logo)?

- 1. Yes
- 2. No

**[ASK ALL, SHOW CCLOCALAD.GIF FOR L7 AND L8]**

L7. Please look at the following informational handout. [IF L1 <> 1 AND L2 <> 1, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this handout is attempting to get you to do? [OPEN END]

L8. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this handout, I would be likely to contact the program.
- b. [IF SM2 = 1] The information in this handout accurately reflects what I have experienced in the program.
- c. I understand the differences between each of the incentives listed.

**[ASK ALL]**

P7. Now, looking back at the three types of advertisements, which of the three makes you MOST interested in seeking more information about the Energy Upgrade California program?

- 1. The PG&E brochure [SHOW PGEBROCHUREmerged.GIF]
- 2. The Energy Ambassador flyer [SHOW SMLOCALADmerged.GIF]
- 3. The County incentives handout [SHOW CCLOCALAD.gif]
- 6. None of these make me want to contact the program.

### **Online Banner Testing**

Now, we would like to show you some of the program's online advertising and ask a few questions about it.

**Online Banner:** Please review this advertisement and then answer the short series of questions that follow.

[SHOW ONLINEBANNERAD.TIF]

B1. Have you seen this advertisement on the Internet BEFORE taking this survey?

1. Yes, I've seen this advertisement
2. No

[ASK IF B1=2]

B2. Have you seen any online advertisements similar to the advertisement shown to you here (that use the same logo)?

1. Yes
2. No

B3. [READ-IN IF B1 AND B2 = 2: "Even if you haven't seen these advertisements before,"] What do you think this message is attempting to get you to do? [OPEN END]

B4. Please rate your agreement with the following statement on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree'

- a. After viewing this advertisement, I would be likely to click on this banner ad to find out more information.

### Website Testing

W1. Have you ever visited the Energy Upgrade California website, located at energyupgradeca.org? [SHOW EUCWEBSITE.jpg]

1. Yes
2. No

[ASK IF W1 = 1]

W2. Thinking about the information available on the website, please rate your agreement with the following statements on a scale of 0 to 10, where 0 means 'strongly disagree' and 10 means 'strongly agree':

- a. The website gave me a good understanding of what the program offers.
- c. The information on the website is easy to understand.
- d. [ASK IF PR1 = 1] The website accurately reflects what I experienced with the program.

## AKA-B

Please read each of the following statements. For these statements, please list of your level of agreement on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree.' For some questions, there is a choice of "Not applicable" available. Please select this option if you have already taken these actions.

AK1. Completing a comprehensive package of modifications to my home, including sealing leaky windows and doors, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances would lead to very deep savings. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

AK2. I think my household should complete a package of improvements like those just described. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

[ROTATE AK3-AK11]

AK3. I feel that it is my job to do more to my home to reduce energy use significantly.

AK4. [SKIP IF PR1 = 1] My household intends to complete a comprehensive package of modifications to our home to get deep reductions in energy use.

AK5. Completing a whole package of home modifications that includes sealing areas around windows and door, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances *would significantly increase the comfort of a home.* [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

AK6. I am concerned enough about the environmental impacts of energy use that I would consider doing a comprehensive package of home modifications to help. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

AK7. My home has problems with drafts and cold or hot spots that my household would like to address. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

AK8. I would feel a little guilty about harming the environment if I didn't do all I could to my home to make it energy efficient.

AK9. I'm really not sure what my home needs to be as energy efficient [or comfortable] as possible.

AK10. I'm not sure whether my home is energy efficient or not. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

AK11. My household could save a lot of money on utility bills if we did a comprehensive package of home modifications (just described). [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

### **Demographics**

Now please answer some final questions about your household. Your responses are for statistical purposes only and will remain confidential.

D1. How many people currently live in your household year-round (more than nine months out of the year), including yourself? [NUMERIC OPEN END, 99 Prefer not to answer]

[Skip if D1=1]

D2. How many children 18 and younger currently live in your household year-round (more than nine months out of the year)? [NUMERIC OPEN END, 99 Prefer not to answer]

D7. How long have you lived in this home?

1. One or two years
2. 3-5 years
3. 6-10 years
4. 11-20 years
5. 21-plus years
9. Prefer not to answer

D8. What is the approximate square footage of your home? (Your best guess is fine.) [NUMERIC OPEN END, 9999998 I don't know 9999999 Prefer not to answer]

**[ASK IF D8 = DK OR REF, ELSE SKIP TO D11]**

D9. How many floors does your home have?

1. 1
2. 2
3. 3 or more
9. Prefer not to answer

D10. How many bedrooms does your home have?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6 or more
9. Prefer not to answer

D11. What is the last level of education you completed?

1. Less than high school
2. High school graduate
3. Some collage/Vocational or technical school
4. College graduate
5. Post graduate education
9. Prefer not to answer

D12. In what year were you born? [NUMERIC OPEN END; 1900-1999]

9999. Prefer not to answer

D13. Which of the following best describes your race or ethnicity?

1. White or Caucasian
2. Black or African American
3. American Indian or Alaska Native
4. Hispanic, Mexican, Latino, Puerto Rican, or other Hispanic
5. Chinese
6. Indian or South Asian
7. Other Asian or Pacific Islander
8. Mixed or multi-racial
00. Another group, please list: \_\_\_\_\_
99. Prefer not to answer

D14. What is your zip code? [NUMERIC OPEN END]

99999. Prefer not to answer

### Closing

Those are the last of our questions. Thanks for your help with this survey! Your responses will greatly help customers save energy and money in the future for California.

## 5.1.2. Workshop Participants

### Survey Introduction

Thank you for your participation in this study. Your feedback is very important to PG&E. We understand that you may have attended a recent workshop for the Energy Upgrade California program. The program is very interested in gaining feedback on its marketing efforts. Your input will greatly help the program increase energy savings for California residents. After completing this survey, we will take your contact information so that we can send you the \$50 honorarium. To begin the survey, please click [here next](#).

### Screener

X1. Is your household currently a customer of PG&E?

1. Yes
2. No [THANK & TERMINATE]
8. I don't know [THANK & TERMINATE]

[ASK IF WS\_MONTH AND WS\_CITY <> BLANK]

X2. Did you recently attend an Energy Upgrade California program informational workshop located in [WS\_CITY] in [WS\_MONTH][WS\_YEAR]?

1. Yes
2. No, I attended the workshop at a different location
3. No, I attended the workshop on a different date
4. No, I did not attend any workshop [THANK & TERMINATE]
8. I don't know. [THANK & TERMINATE]

[ASK IF WS\_MONTH = BLANK AND WS\_CITY<>BLANK]

X2a. Did you recently attend an Energy Upgrade California program informational workshop located in [WS\_CITY]?

1. Yes [SKIP TO X4]
2. No, I attended the workshop at a different location
4. No, I did not attend any workshop [THANK & TERMINATE]
8. I don't know. [THANK & TERMINATE]

[ASK IF WS\_CITY = BLANK AND VS\_MONTH <>BLANK]

X2b. Did you recently attend an Energy Upgrade California program informational workshop in [WS\_MONTH][WS\_YEAR]?

1. Yes
3. No, I attended the workshop on a different date
4. No, I did not attend any workshop [THANK & TERMINATE]
8. I don't know. [THANK & TERMINATE]

[ASK IF WS\_CITY AND WS\_MONTH = BLANK]

X2c. Did you recently attend an Energy Upgrade California program informational workshop?

1. Yes
4. No, I did not attend any workshop [THANK & TERMINATE]
8. I don't know. [THANK & TERMINATE]

[ASK IF X2 = 2 OR X2A = 2 OR X2B = 1 OR 3 OR X2C = 1, ELSE SKIP TO X4]

X3. Where did you attend the workshop? [OPEN END]

[ASK IF X2 = 3 OR X2A = 1 OR 2 OR X2B = 3 OR X2C = 1, ELSE SKIP TO US1]

X4. When did you attend the workshop? Please provide the month and year only. [OPEN END]

### **Exposure to EUC Messaging**

First, I have some questions about the types of media you may be exposed to.

US1. About how many hours per week do you . . .

- a. Watch TV [NUMERIC OPEN END, 0-99]
- b. Surf the Internet [NUMERIC OPEN END, 0-99]
- c. Listen to radio, not counting satellite radio [NUMERIC OPEN END, 0-99]

[IF US1B>0]

US2. Will you list 3 publicly accessible websites that you frequently (on a daily or weekly basis) go to? [OPEN END]

US3. How often do you read the newspaper (paper copy not online news)?

1. Every day
2. Four to six times per week
3. One to three times per week
4. Less than once a week
5. Never

ME1. Where did you FIRST learn about the Energy Upgrade California workshop you attended?

01. A contractor
02. Farmer's market or community event
03. Internet ad
04. Email
05. Direct mailing to your home, by mail, or a door hanger
06. Radio ad
07. Television ad
08. Newspaper ad
09. Billboard or transit ad
10. Mentioned by family member, friend, co-worker or neighbor
00. Other, please describe: \_\_\_\_\_
96. Nowhere

ME1a. Did you also learn about where and when the workshop was going to be held from this same source?

1. Yes
2. No

[ASK IF ME1A = 2]

EM1. Where did you FIRST get information about where and when that workshop was going to be held?

01. A contractor
02. Farmer's market or community event
03. Internet ad
04. Email
05. Direct mailing to your home, by mail, or a door hanger
08. Newspaper ad
10. Mentioned by family member, friend, co-worker or neighbor
00. Other, please describe: \_\_\_\_\_
96. Nowhere else.

EM2. Had you heard of Energy Upgrade California before learning about the workshop?

1. Yes
2. No

[ASK IF EM2 = 1, ELSE SKIP TO ME4]

EM2a. Where did you first learn about Energy Upgrade California?

01. A contractor
02. Farmer's market or community event
03. Internet ad
04. Email
05. Direct mailing to your home, by mail, or a door hanger
06. Radio ad
07. Television ad
08. Newspaper ad
09. Billboard or transit ad
10. Mentioned by family member, friend, co-worker or neighbor
00. Other, please describe: \_\_\_\_\_

ME3. Where ELSE have you heard about Energy Upgrade California, if anywhere? Select all that you recall. (MULTIPLE RESPONSE, UP TO 7)

01. A contractor
02. Farmer's market or community event
03. Internet ad
04. Email
05. Direct mailing to your home, by mail, or a door hanger
06. Radio ad

07. Television ad
08. Newspaper ad
09. Billboard or transit ad
10. Mentioned by family member, friend, co-worker or neighbor
00. Other, please describe: \_\_\_\_\_
96. Nowhere else.

ME4. What does the phrase “Energy Upgrade California” mean to you? [OPEN END]

ME5. What do you think are the main benefits of the Energy Upgrade California program? [OPEN END, 96 None]

{FIELD RESEARCH TEAM BACK-CODE ONLY – DO NOT SHOW LIST TO RESPONDENT}

1. Rebates or incentives
2. Saving money on utility bills
3. Saving energy
4. Better for the environment
5. Increased comfort
6. Better health/air quality in the home
7. Other (please define/describe): \_\_\_\_\_

#### **Participant Project Status**

PR1. Have you signed up to get a home upgrade through Energy Upgrade California?

1. Yes
2. No

[ASK IF PR1 = 1, ELSE SKIP TO SM1]

PR2. Has a contractor come to your home to conduct an energy assessment to see if you qualify for incentives for home energy upgrades?

1. Yes
2. No

[ASK IF PR2 = 1, ELSE SKIP TO SM1]

PR3. What is the status of the home energy upgrades that you may receive an incentive for?

1. The work on my home is complete
2. The work is in progress
3. The work has not started yet
4. Not sure if I want to continue
5. Not sure if my home qualifies

PR4. On a scale from 0-10, where 0 is “not at all influential” and 10 is “very influential”, how influential was the workshop on your decision to participate in the program?

[ASK IF PR4<7]

PR5. Please explain why you gave that rating?

[ASK IF COUNTY\_CODE = 4]

SM1. Have you ever heard of the Energy Ambassadors program?

1. Yes
2. No

[ASK IF SM1 = 1, ELSE SKIP TO BAR1]

SM2. Have you signed up to participate in the Energy Ambassadors program?

1. Yes
2. No

SM3. How did you hear about the Energy Ambassadors program? Please select all that apply.

01. Contractor
02. Community event
03. Internet ad
04. Email
05. Direct mailing to your home, by mail, or a door hanger
06. Radio ad
07. Television ad
08. Newspaper ad
09. Mentioned by family member, friend, co-worker or neighbor
00. Other, please describe: \_\_\_\_\_

SM4. Have you hosted any Energy Ambassador parties at your home?

1. Yes
2. No

[ASK IF SM4 = 1, ELSE SKIP TO BAR1]

SM5. Approximately how many total people have attended the Energy Ambassador parties at your home? [NUMERIC OPEN END]

## BARRIERS TO PARTICIPATION

[ASK PR1 = 2]

BAR1. Which of the following BEST describes why you haven't signed up for any home upgrades?

1. The initial cost is too high.
2. I haven't had time.
3. I haven't found a contractor yet.
4. I need more information about the program.
5. My home doesn't need any of the upgrades sponsored by the program.
6. Cannot get financing to cover the project cost.
00. Other, specify: \_\_\_\_\_

[ASK IF BAR1 = 1, ELSE SKIP TO BAR3]

BAR2. Other than cost, are there any other reasons you have not yet signed up for any home upgrades? (MULTIPLE RESPONSE, UP TO 5)

2. I haven't had time to contact them.
3. I haven't found a contractor yet.
4. I need more information about the program.
5. My home doesn't need any of the upgrades sponsored by the program.
00. Other, specify: \_\_\_\_\_

BAR3. What could the program do to help you sign up for upgrades? [OPEN END] [96=Nothing]

#### **LEVEL 2.1 – EDUCATION – WORKSHOPS**

EM4. In general, what effect would you say the Energy Upgrade California workshop had on your interest in Energy Upgrade California Program? Did it affect your interest...

1. Positively
2. Negatively or
3. Did it not have an effect on your interest in the program

WS5. Did you learn anything new about the Energy Upgrade California program from the information you received at these workshops?

1. Yes
2. No [SKIP TO MM1]

WS6.What did you learn? [OPEN END]

#### **Marketing Exposure Battery**

Now we have some questions about what you have heard about the Energy Upgrade California program.

#### **Level 1: Awareness: Mass Media Advertising**

[ASK ALL]

MM1. Do you remember seeing, hearing or reading any advertisements during the past 12 months for the Energy Upgrade California program [IF EM2a or ME3 = 4, 5, 6, OR 8, READ IN: “other than those you have already selected”]?

1. Yes
2. No

[ASK IF MM1 = 1, ELSE SKIP TO MM2]

MM5. If possible, please list any advertising slogans or messages you can recall for Energy Upgrade California. [OPEN END]

{FIELD RESEARCH TEAM BACK-CODE LIST – DO NOT SHOW LIST TO RESPONDENT}

1. “Insulate me! I’m drafty!”
2. “Up to \$4,000 in energy upgrade incentives”
3. “Don’t miss the window”
4. “Did you know that if you do several home energy improvements at once you can achieve greater energy savings?”
6. “Take advantage of these great incentives today and find out about additional local government rebates.”
7. “Reduce energy use. Save money. Create jobs.”
8. “Incentives” (General)
9. “Lower bills” (General)
10. “Comfort” (General)
11. “Participating contractors” (General)
12. “The environment” (general)

MM7. Please name any organizations that you believe sponsor the Energy Upgrade California program. A best guess is fine. [OPEN END]

{FIELD RESEARCH TEAM BACK-CODE LIST – DO NOT SHOW LIST TO RESPONDENT}

1. PG&E
2. SMUD
3. SCE/SoCal Edison/Edison
4. SCG/The Gas Company/SoCal Gas
5. SDG&E
6. CPUC (California Public Utilities Commission)
7. State of California (general)
8. California Energy Commission
9. City government
10. County government
11. Sierra Club

- 12. Other utility or energy provider
- 13. Other non-profit
- 14. Other government organization
- 15. Local Contractor
- 98. (Don't know)

MM2. Do you recall seeing or hearing any of the ads for the program ... [1 = Yes, 2 = No]  
[ROTATE]

- a. [SKIP IF EM2A=7 or ME3 = 7] On TV? [EMBED: 1\_ENERGIZED ENG 30-no logos.mov]
- b. [SKIP IF EM2A=6 or ME3 = 6] On the radio? [EMBED: StopWaste.org\_H-House\_Radio\_30\_MIX\_042811.mp3]
- c. [SKIP IF EM2A=8 or ME3 = 8] In the newspaper? [SHOW: PRINTAD cleaned.GIF]
- d. [SKIP IF EM2A=3 or ME3 = 3] On the Internet? [SHOW: ONLINEBANNERAD.TIF]
- e. [SKIP IF EM2A=9 or ME3 = 9] On a billboard or transit ad? [SHOW: TRANSITAD1.jpg & TRANSITAD2.jpg]

[IF MM1 = 2 and MM2a-e = 2 and EM2a <> 3, 4, 5, 6, 7, 8, or 9 and ME3 <>3, 4, 5, 6, 7, 8, or 9,  
SKIP TO M1]

MM3. In general, what effect would you say the advertising you saw had on your interest in Energy Upgrade California Program? Did it affect your interest...

- 1. Positively
- 2. Negatively or
- 3. Did it not have an effect on your interest in the program

MM8. What changes, if any, could be made to Energy Upgrade California advertising to increase your interest in the program?

- 00. [OPEN END]
- 96. (None/No changes)
- 98. (Don't know)

#### **Level 2: Education: Representatives at Community Events**

**[SKIP TO M2 IF EM2A=2 OR ME3=2]**

M1. Energy Upgrade California has also had representatives attend community events to share information about energy efficiency equipment and programs. Have you heard anything about the program at a community event such as a farmer's market or trade show?

- 1. Yes
- 2. No

**[IF M1 = 2, SKIP TO CM1]**

M2. [IF EM2A=2 or ME3 = 2, READ-IN: "You mentioned that you heard about the Energy Upgrade California program at a farmer's market or community event."] At which farmer's markets or community event do you recall hearing about the program?

1. [IF COUNTY\_CODE = 1] Danville Farmers Market
2. [IF COUNTY\_CODE = 1] Diablo Valley Farmers Market
3. [IF COUNTY\_CODE = 1] San Ramon Farmers Market
4. [IF COUNTY\_CODE = 1] Pittsburg Farmers Market
5. [IF COUNTY\_CODE = 1] Orinda Farmers Market
6. [IF COUNTY\_CODE = 1] Martinez Farmers Market
7. [IF COUNTY\_CODE = 1] Walnut Creek Farmers Market
8. [IF COUNTY\_CODE = 1] The Concord GreenFEST
9. [IF COUNTY\_CODE = 1] The Walnut Creek FamilyFest
10. [IF COUNTY\_CODE = 1] The Walnut Creek Walnut Festival
11. [IF COUNTY\_CODE = 1] El Cerrito Farmers Market
12. [IF COUNTY\_CODE = 1] Brentwood Farmers Market
13. [IF COUNTY\_CODE = 1] Point Richmond Farmers Market
14. [IF COUNTY\_CODE = 1] The Concord Fall Home and Garden Show
15. [IF COUNTY\_CODE = 1] The Kaiser Farmers Market (Walnut Creek)
16. [IF COUNTY\_CODE = 2] Kerman Market
17. [IF COUNTY\_CODE = 2] Kingsburg Farmers Market
18. [IF COUNTY\_CODE = 2] Reedley Farmers Market
19. [IF COUNTY\_CODE = 2] Fresno Then and Now Show
20. [IF COUNTY\_CODE = 2] Big Fresno Fair
21. [IF COUNTY\_CODE = 2] Fresno Lowe's Table
22. [IF COUNTY\_CODE = 2] Fresno Chamber of Commerce
23. [IF COUNTY\_CODE = 2] Fresno Orchard Supply Hardware Table
24. [IF COUNTY\_CODE = 2] Fresno Council District 1 Engagement Meeting
25. [IF COUNTY\_CODE = 2] Fresno Council District 5 Engagement Meeting
26. [IF COUNTY\_CODE = 2] Fresno Council District 7 Neighborhood Canvas
27. [IF COUNTY\_CODE = 2] Fresno Fig Garden Area Neighborhood Canvas
28. [IF COUNTY\_CODE = 2] North Fresno Neighborhood Canvas
29. [IF COUNTY\_CODE = 2] Clovis Railroad Park Area Neighborhood Canvas
30. [IF COUNTY\_CODE = 2] Clovis Orchard Supply Hardware Table
31. [IF COUNTY\_CODE = 2] Clovis Farmers Market
32. [IF COUNTY\_CODE = 2] Clovis Advantage Trade Show
33. [IF COUNTY\_CODE = 4] San Mateo Green Fair
34. [IF COUNTY\_CODE = 4] San Mateo Home Garden and Gourmet Show
35. [IF COUNTY\_CODE = 4] Burlingame Farmers Market
36. [IF COUNTY\_CODE = 4] San Bruno Farmers Market
37. [IF COUNTY\_CODE = 4] San Mateo Farmers Market
38. [IF COUNTY\_CODE = 4] Pacifica Fogfest
39. [IF COUNTY\_CODE = 4] South San Francisco Farmers Market
40. [IF COUNTY\_CODE = 4] San Carlos Art & Wine Festival

41. [IF COUNTY\_CODE = 4] Menlo Park Farmers Market
42. [IF COUNTY\_CODE = 4] Redwood City Farmers Market
43. [IF COUNTY\_CODE = 5] San Jose Downtown Farmers Market
44. [IF COUNTY\_CODE = 5] San Jose Blossom Hill Farmers Market
45. [IF COUNTY\_CODE = 5] San Jose Willow Glen Farmers Market
46. [IF COUNTY\_CODE = 5] Sunnyvale Farmers Market
47. [IF COUNTY\_CODE = 5] Saratoga Farmers Market
48. [IF COUNTY\_CODE = 5] Cupertino Diwali –Festival of Lights
49. [IF COUNTY\_CODE = 5] Los Altos Farmers Market
50. [IF COUNTY\_CODE = 5] Los Gatos Farmers Market
51. [IF COUNTY\_CODE = 5] San Jose Home Show
52. [IF COUNTY\_CODE = 5] Cupertino Farmers Market
53. [IF COUNTY\_CODE = 3] Auburn Farmers Market
54. [IF COUNTY\_CODE = 3] Rocklin Farmers Market
55. [IF COUNTY\_CODE = 3] Granite Bay Farmers Market
00. Other, please specify \_\_\_\_\_
98. Don't Know

M4. In general, what effect would you say the event had on your interest in Energy Upgrade California Program? Did it affect your interest...

1. Positively
2. Negatively or
3. Did it not have an effect on your interest in the program

M5. Did you learn anything new about the Energy Upgrade California program from the information you received at these events?

1. Yes
2. No [SKIP TO CM1]

M6.What did you learn? [OPEN END]

### **Contractor Marketing**

[SKIP TO CM2 IF EM2A=1 OR ME3=1]

CM1. Do you remember hearing about or discussing the Energy Upgrade California program with a contractor?

1. Yes
2. No

[ASK IF CM1 = 1 OR EM2A=1 OR ME3=1, ELSE SKIP TO P1]

CM2. [READ IN IF EM2A=1 or ME3 = 1: "You mentioned that you heard of the Energy Upgrade California program through a contractor."] How did the building contractor make you aware of the program? (MULTIPLE RESPONSE, UP TO 4)

1. Face-to-face discussion
2. Door hanger
3. A group talk or presentation
00. Other, please describe: \_\_\_\_\_

CM3. In general, what effect would you say the contractor had on your interest in Energy Upgrade California Program? Did it affect your interest...

1. Positively
2. Negatively or
3. Did it not have an effect on your interest in the program

CM4. Did you learn anything new about the Energy Upgrade California program from the information you got from the contractor?

1. Yes
2. No [SKIP TO P1]

CM5. What did you learn? [OPEN END]

### **Content Testing**

#### **Print Collateral Testing**

[ROTATE MODULES: P1-P6, L1-L4, L5-L8, P7]

TTP1. Now, we would like to show you some of the program's print advertising and ask a few questions about it. For the purposes of these questions, please disregard any location-specific information you see in these materials. [INSERT SCREEN BREAK]

**TP1. Print:** Please review this advertisement and then answer the short series of questions that follow.

[SHOW PG&E BROCHURE: PGEBROCHUREMERGED.GIF]

P1. Have you seen this brochure BEFORE it was shown to you here?

1. Yes, I've seen this brochure
2. No

[ASK IF P1=2]

P2. Have you seen any advertisements similar to the brochure shown to you here (with the same logo)?

1. Yes
2. No

P3. [IF P1 = 2 AND P2 = 2, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this message is attempting to get you to do? [OPEN END]

P4. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this brochure, I would be likely to seek out more information on this topic.
- b. [IF PR1 = 1] The information in this brochure accurately reflects what I have experienced in the program.
- c. I understand the two types of upgrade packages presented in this brochure.

P5. Now I would like for you to review the information on panel 1 (highlight) of this brochure. Please read each of these five key benefits of participating in the program. Now, on a scale of 0 to 10 where 0 means 'not at all' and 10 means 'very much,' how much do each of these five benefits make you want to participate in the Energy Upgrade California program? [0-10]

- a. Incentives
- b. Lower bills
- c. Comfort
- d. Participating contractors
- e. The environmental benefits

P6. And of these five benefits, which one MOST makes you want to participate in the program?

1. Incentives
2. Lower bills
3. Comfort
4. Participating contractors
5. The environmental benefits

## LOCAL OUTREACH TESTING

[IF COUNTY = SAN MATEO, SHOW SMLOCALADMERGED.GIF,

IF COUNTY <> SAN MATEO, SKIP TO L3 AND L4]

L1. Have you ever seen this advertisement BEFORE it was shown to you here?

1. Yes
2. No

L2. Have you seen any other advertisements or handouts similar to the advertisements shown to you here (with the same logo)?

1. Yes
2. No

[ASK ALL]

SHOW SMLOCALADMERGED.GIF FOR L3 AND L4]

L3. Please look at the following informational handout. [IF L1 <> 1 AND L2 <> 1, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this handout is attempting to get you to do? [OPEN END]

L4. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this handout, I would be likely to contact the program.
- b. [IF SM1 = 1] The information in this handout accurately reflects what I have experienced in the program.
- c. I understand the information about the Personal Energy Review.
- d. I understand the information about becoming an Energy Ambassador. [IF COUNTY = CONTRA COSTA, SHOW CCLOCALAD.GIF,

IF COUNTY <> CONTRA COSTA, SKIP TO L7 AND L8]

L5. Have you ever seen this advertisement BEFORE it was shown to you here?

1. Yes
2. No

L6. Have you seen any other advertisements or handouts similar to the advertisements shown to you here (with the same logo)?

1. Yes
2. No

[ASK ALL, SHOW CCLOCALAD.GIF FOR L7 AND L8]

L7. Please look at the following informational handout. [IF L5 <> 1 AND L6 <> 1, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this handout is attempting to get you to do? [OPEN END]

L8. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this handout, I would be likely to contact the program.
- b. [IF SM2 = 1] The information in this handout accurately reflects what I have experienced in the program.

c. I understand the differences between each of the incentives listed.

[ASK ALL]

P7. Now, looking back at the three types of advertisements, which of the three makes you MOST interested in seeking more information about the Energy Upgrade California program?

1. The PG&E brochure [SHOW PGEBROCHUREmerged.GIF]
2. The Energy Ambassador flyer [SHOW SMLOCALADmerged.GIF]
3. The County incentives handout [SHOW CCLOCALAD.gif]
6. None of these make me want to contact the program.

### **Online Banner Testing**

Now, we would like to show you some of the program's online advertising and ask a few questions about it.

**Online Banner:** Please review this advertisement and then answer the short series of questions that follow.

[SHOW ONLINEBANNERAD.TIF]

B1. Have you seen this advertisement on the Internet BEFORE taking this survey?

1. Yes, I've seen this advertisement
2. No

[ASK IF B1=2]

B2. Have you seen any online advertisements similar to the advertisement shown to you here (that use the same logo)?

1. Yes
2. No

B3. [READ-IN IF B1 AND B2 = 2: "Even if you haven't seen these advertisements before,"] What do you think this message is attempting to get you to do? [OPEN END]

B4. Please rate your agreement with the following statement on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree'

- a. After viewing this advertisement, I would be likely to click on this banner ad to find out more information.

### **Website Testing**

W1. Have you ever visited the Energy Upgrade California website, located at energyupgradeca.org? [SHOW EUCWEBSITE.jpg]

1. Yes
2. No

[ASK IF W1 = 1]

W2 Thinking about the information available on the website, please rate your agreement with the following statements on a scale of 0 to 10, where 0 means 'strongly disagree' and 10 means 'strongly agree':

- a. The website gave me a good understanding of what the program offers.
- c. The information on the website is easy to understand.
- d. [ASK IF PR1 = 1] The website accurately reflects what I experienced with the program.

#### **AKA-B**

Please read each of the following statements. For these statements, please list of your level of agreement on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree.' For some questions, there is a choice of "Not applicable" available. Please select this option if you have already taken these actions.

AK1. Completing a comprehensive package of modifications to my home, including sealing leaky windows and doors, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances would lead to very deep savings. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

AK2. I think my household should complete a package of improvements like those just described in these materials. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

[ROTATE AK3-AK11]

AK3. I feel that it is my job to do more to my home to reduce energy use significantly.

AK4. [ASK IF PR1 = 1] My household intends to complete a comprehensive package of modifications to our home to get deep reductions in energy use.

AK5. Completing a whole package of home modifications that includes sealing areas around windows and door, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances *would significantly increase the comfort of a home.* [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

AK6. I am concerned enough about the environmental impacts of energy use that I would consider doing a comprehensive package of home modifications to help. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

AK7. My home has problems with drafts and cold or hot spots that my household would like to address. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

AK8. I would feel a little guilty about harming the environment if I didn't do all I could to my home to make it energy efficient.

AK9. I'm really not sure what my home needs to be as energy efficient [or comfortable] as possible.

AK10. I'm not sure whether my home is energy efficient or not. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

AK11. My household could save a lot of money on utility bills if we did a comprehensive package of home modifications. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

### **Demographics**

Now please answer some final questions about your household. Your responses are for statistical purposes only and will remain confidential.

D17. Which of the following counties do you currently live in?

1. Contra Costa
2. Fresno
3. Placer
4. San Mateo
5. Santa Clara
00. Other, specify: \_\_\_\_\_

D1. How many people currently live in your household year-round (more than nine months out of the year), including yourself? [NUMERIC OPEN END, 99 Prefer not to answer]

[Skip if D1=1]

D2. How many children 18 and younger currently live in your household year-round (more than nine months out of the year)? [NUMERIC OPEN END, 99 Prefer not to answer]

D3. Do you own or rent your home?

1. Own
2. Rent
00. Neither, please describe: \_\_\_\_\_
9. Prefer not to answer

D4. Which of the following types of housing units would you say best describes your home? Is it a..?

1. Single-family detached house
2. Single-family attached house (townhouse, row house, excluding duplex)

3. Duplex
4. Apartment building with 2-4 units
5. Apartment building with 5 or more units
6. Mobile home or house trailer
9. Prefer not to answer

D5. Does your home have central air conditioning and/or central heat?? Please select all that apply.

1. Yes – central air conditioning
3. Yes – central heating
2. No – central air conditioning or heating
9. Prefer not to answer

D6. In what year was your home built?

1. 2008 to 2012
2. 2001 to 2007
3. 1991 to 2000
4. 1981 to 1990
5. 1971 to 1980
6. 1961 to 1970
7. 1951 to 1960
8. 1941 to 1950
9. 1940 or earlier
99. Prefer not to answer

D7. How long have you lived in this home?

1. One or two years
2. 3-5 years
3. 6-10 years
4. 11-20 years
5. 21-plus years
9. Prefer not to answer

D8. What is the approximate square footage of your home? (Your best guess is fine.) [NUMERIC OPEN END, 9999998 I don't know 99999999 Prefer not to answer]

[ASK IF D8 = DK OR REF, ELSE SKIP TO D11]

D9. How many floors does your home have?

1. 1
2. 2
3. 3 or more

9. Prefer not to answer

D10. How many bedrooms does your home have?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6 or more
9. Prefer not to answer

D11. What is the last level of education you completed?

1. Less than high school
2. High school graduate
3. Some collage/Vocational or technical school
4. College graduate
5. Post graduate education
9. Prefer not to answer

D12. In what year were you born? [NUMERIC OPEN END; 1900-1999]

9999. Prefer not to answer

D13. Which of the following best describes your race or ethnicity?

1. White or Caucasian
2. Black or African American
3. American Indian or Alaska Native
4. Hispanic, Mexican, Latino, Puerto Rican, or other Hispanic
5. Chinese
6. Indian or South Asian
7. Other Asian or Pacific Islander
8. Mixed or multi-racial
00. Another group, please list: \_\_\_\_\_
99. Prefer not to answer

D14. What is your zip code? [NUMERIC OPEN END]

99999. Prefer not to answer

D15. Which of the following best describes your current employment status?

1. Employed Full Time
2. Employed Part Time
3. Not Employed, Currently Seeking Employment

4. Not Employed, Not Seeking Employment
5. Retired
6. Student
9. Prefer not to answer

D16. Which of the following best represents your annual household income from all sources in 2011, before taxes? Was it ...

1. Under \$25,000
2. \$25,000 to \$34,999
3. \$35,000 to \$49,999
4. \$50,000 to \$74,999
5. \$75,000 to \$99,999
6. \$100,000 to \$124,999
7. \$125,000 to \$149,999
8. Over \$150,000
9. Prefer not to answer

### Closing

Those are the last of our questions. Thanks for your help with this survey! Your responses will greatly help customers save energy and money in the future for California. Please enter the name address where you would like us to mail your check:

We are doing research throughout the year to help the program grow to more homes. We may contact you again in a few months to further explore your program experience. On behalf of the state of California, thank you very much for your time and help with this study!

## 5.2. Survey Frequency Tabulations

### 5.2.1. Target Population

#### Screener

X1. Is your household currently a customer of PG&E?

	n=235
Yes	100%

D3. Do you own or rent your home?

	n=235
Own	100%

D4. Which of the following types of housing units would you say best describes your home? Is it a..?

	n=235
Single-family detached house	100%

D5. Does your home have central air conditioning?

	n=235
Yes - central air conditioning	59%
Yes - central heating	91%
Total	150%

D6. In what year was your home built?

	n=235
1971 to 1980	29%
1961 to 1970	28%
1951 to 1960	24%
1941 to 1950	12%
1940 or earlier	8%

Total	100%
-------	------

D17. Which of the following counties do you currently live in?

	n=235
Contra Costa	25%
Fresno	3%
Placer	1%
San Mateo	27%
Santa Clara	44%
Total	100%

D15. Which of the following best describes your current employment status?

	n=235
Employed Full Time	64%
Employed Part Time	10%
Not Employed, Currently Seeking Employment	1%
Not Employed, Not Seeking Employment	6%
Retired	18%
Total	100%

D16. Which of the following best represents your annual household income from all sources in 2011, before taxes? Was it ...

	n=235
\$100,000 to under \$124,999	2%
\$125,000 to \$149,999	10%
\$150,000 or more	89%
Total	100%

[IF D15 = 5, THEN D16 = 2, 3, 4 OR 5 TO CONTINUE; IF D15 <> 5, THEN D16 = 4 OR 5 TO CONTINUE]

### Exposure to EUC Messaging

Great! You qualify for our study. First, I have some questions about the types of media you may be exposed to.

US1. About how many hours per week do you . . .

- a. Watch TV
- b. Surf the Internet [NUMERIC OPEN END, 0-99]
- c. Listen to radio, not counting satellite radio [NUMERIC OPEN END, 0-99]

	Watch TV n=235	Surf the Internet n=235	Listen to the Radio n=235
0	2%	1%	10%
1	2%	1%	12%
2	1%	5%	15%
3	2%	4%	11%
4	1%	3%	3%
5	7%	8%	14%
6	2%	4%	2%
7	3%	7%	3%
8	3%	3%	4%
9	1%	0%	1%
10	17%	20%	12%
12	5%	2%	2%
14	3%	3%	1%
15	10%	11%	4%
16	1%	0%	1%
18	1%	0%	0%
20	17%	13%	1%
21	3%	2%	1%
22	0%	0%	0%
24	1%	1%	0%
25	6%	3%	0%
28	3%	0%	0%
30	4%	2%	0%
35	1%	1%	0%
40	2%	3%	1%
43	0%	0%	0%

45	0%	0%	1%
50	0%	0%	0%
60	0%	1%	0%
70	0%	1%	0%
Total	100%	100%	100%

[IF US1b>0]

US2. Will you list 3 publicly accessible (for free) websites that you frequently (on a daily or weekly basis) go to? [OPEN END, MULTIPLE RESPONSE]

	n=232
Google	42%
Yahoo (general)	41%
Facebook	22%
CNN	13%
AOL	3%
ESPN	5%
Amazon	10%
eBay	7%
Wikipedia	3%
Twitter	1%
Weather website (Weather Channel, Weather Underground, etc)	5%
NY Times	3%
Other national news (NPR, Washington Post, etc)	9%
International news (BBC, etc)	3%
Local news (sfgate.com, San Jose Mercury News, KGO, etc)	12%
Schools and universities	2%
LinkedIn	3%
Email (MSN, Hotmail, Comcast, Gmail, Yahoo mail, etc)	10%
Craigslist	4%

Other online shopping website (Overstock.com, Zappos, etc)	2%
Other social networking website (Pinterest, etc)	3%
Brick-and-mortar retailer or distributor website (Macy's, Neiman Marcus, Lowes, etc)	3%
Mapping website (Mapquest, etc)	2%
Utility website	5%
Entertainment website (EW, People, etc)	5%
Bank website	4%
Finance website (stocks, eTrade, etc)	7%
Local group/interest website	2%
Local sports website (SFGiants, etc)	6%
Deal-of-the-day websites (Groupon, Living Social, Woot, etc)	6%
Video/music streaming website (Netflix, Hulu, etc)	3%
Bing	1%
Travel-related website	4%
(None)	2%
(Other)	25%

US3. How often do you read the newspaper (paper copy not online news)?

	n=235
Every day	40%
Four to six times per week	11%
One to three times per week	17%
Less than once a week	19%
Never	13%
Total	100%

EM2. Have you ever heard or seen the term “Energy Upgrade California”?

	n=235
Yes	26%

No	74%
Total	100%

EM2aa. Have you ever seen any ads, displays, or handouts displaying this logo? [DISPLAY EUCLOGO.png]

	n=235
Yes	13%
No	87%
Total	100%

[IF EM2 = 2 AND EM2AA = 2, SKIP TO MM2]

EM2a. Where did you first learn about Energy Upgrade California?

	n=71
A contractor	1%
Farmer's market or community event	3%
Internet ad	10%
Email	1%
Direct mailing to your home, by mail, or a door hanger	18%
Radio ad	27%
Television ad	10%
Newspaper ad	11%
Billboard or transit ad	1%
Mentioned by family member, friend, co-worker or neighbor	10%
This survey	4%
(Don't know)	3%
Total	100%

ME3. Where else have you heard about Energy Upgrade California, if anywhere? Select all that you recall. (MULTIPLE RESPONSE, UP TO 7)

	n=71
Contractor	1%
Internet ad	3%
Email	7%
Direct mailing to your home, by mail, or a door hanger	11%
Radio ad	11%
Television ad	7%
Newspaper ad	16%
Billboard or transit ad	6%
Mentioned by family member, friend, co-worker or neighbor	11%
Nowhere else	34%
(Other)	3%
(Don't know)	1%

ME4. What does the phrase "Energy Upgrade California" mean to you? [OPEN END, MULTIPLE RESPONSE]

	n=71
Save energy/energy efficiency/energy conservation	52%
Rebates	13%
Equipment upgrades	31%
Cost savings for energy efficiency	3%
Clean/new energy	20%
Related to Smart Meters	3%
'Green'	6%
Related to home/house	28%

Related to California/state government working together to improve efficiency	10%
(Other)	4%
Don't know/can't think of any	6%

ME5. What do you think are the main reasons to sign up for the Energy Upgrade California program, if there are any? [OPEN END, MULTIPLE RESPONSE, 96 None]

	n=71
Rebates/incentives/make upgrades more affordable	11%
Save money/lower bill	37%
Saving energy/being more efficient	31%
Raises awareness/educates consumer on efficiency options	3%
Good for the environment/social responsibility	24%
None	11%
(Other)	1%
(Don't know)	16%

### Participant Project Status

PR1. Have you signed up to get a home upgrade through Energy Upgrade California?

	n=71
Yes	4%
No	96%
Total	100%

[ASK IF PR1 = 1, ELSE SKIP TO SM1]

PR2. Has a contractor come to your home to conduct an energy assessment to see if you qualify for incentives for home energy upgrades?

	n=3
Yes	33%
No	67%
Total	100%

[ASK IF PR2 = 1, ELSE SKIP TO SM1]

PR3. What is the status of the home energy upgrades that you may receive an incentive for?

	n=235
The work is in progress	100%

[ASK IF D17 = 4]

SM1. Have you ever heard of the Energy Ambassadors program?

	n=235
No	100%

[ASK IF SM1 = 1, ELSE SKIP TO BAR1]

SM2. Have you signed up to participate in the Energy Ambassadors program?

*No respondent qualified for this question.*

SM3. How did you hear about the Energy Ambassadors program? Please select all that apply.

*No respondent qualified for this question.*

[ASK IF SM2 = 1, ELSE SKIP TO BAR1]

SM4. Have you hosted any Energy Ambassador parties at your home?

*No respondent qualified for this question.*

[ASK IF SM4 = 1, ELSE SKIP TO BAR1]

SM5. Approximately how many total people have attended the Energy Ambassador parties at your home? [NUMERIC OPEN END]

*No respondent qualified for this question.*

## BARRIERS TO PARTICIPATION

[ASK IF PR1 = 2]

BAR1. Which of the following BEST describes why you haven't signed up for any home upgrades?

	n=68
The initial cost is too high.	13%
I haven't had time to contact a contractor.	3%
I need more information about the program.	66%
My home doesn't need any of the upgrades sponsored by the program.	7%
I cannot get financing to cover the project cost.	2%
Rent/did not qualify for program	3%
Other projects to complete first	2%
(Other)	4%
Total	100%

[ASK IF BAR1 = 1, ELSE SKIP TO BAR3]

BAR2. Other than cost, are there any other reasons you have not yet signed up for any home upgrades? (MULTIPLE RESPONSE, UP TO 5)

	n=9
I haven't had time.	33%
I need more information about the program.	67%
(Other)	11%

BAR3. What could the program do to help you sign up for upgrades? [OPEN END] [96=Nothing]

	n=68
More outreach (general)	9%
More information (general)	29%
More information on measures covered or provided	3%
More information on costs	9%
More information on benefits of participation	4%
More information on financing	4%
Higher rebates/more financial incentives/cheaper upgr	22%
Send information by mail	13%
Lower the rules/requirements/restrictions to participate	2%
Nothing	19%
(Other)	9%
(Don't know)	9%

### Marketing Exposure Battery

Now we have some questions about where you have heard about the Energy Upgrade California program.

#### Level 1: Awareness: Mass Media Advertising

MM1. Do you remember seeing, hearing or reading any advertisements during the past 12 months for the Energy Upgrade California program [IF EM2a or ME3 = 4 TO 10, READ IN: "other than those already selected"]?

	n=71
Yes	23%
No	78%
Total	100%

[IF MM1 = 2 AND EM2A <> 4, 5, 6, 7, 8, 9, OR 10 AND ME3<>4, 5, 6, 7, 8, 9, OR 10, SKIP TO MM2]

MM5. Please tell me all the advertising slogans or messages you can recall for Energy Upgrade California. [OPEN END, MULTIPLE RESPONSE]

	n=61
'Reduce energy use. Save money. Create Jobs' (whole or part)	2%
Rebates or incentives (general)	5%
Lower bill (general)	3%
The environment/saving energy (general)	8%
(Can recall how saw ad but not specific messaging)	15%
None/Don't remember	61%
(Other)	8%

MM7. Please name any organizations that you believe sponsor the Energy Upgrade California program. A best guess is fine. [OPEN END, MULTIPLE RESPONSE]

	n=61
PG&E	54%
CPUC (California Public Utilities Commission)	10%
State of California (general)	12%
Other non-profit	2%
Retailer/manufacturer of EE equipment	8%
(Other)	5%
(Don't know)	21%

MM2. Do you recall seeing any of the following ads for the program ... [1 = Yes, 2 = No] [ROTATE]

- a. [SKIP IF ME3 = 8 OR EM2a = 8] On TV? [EMBED: 1\_ENERGIZED ENG 30-no logos.mov]
- b. [SKIP IF ME3 = 7 OR EM2a = 7] On the radio? [EMBED: StopWaste.org\_H-House\_Radio\_30\_MIX\_042811.mp3]
- c. [SKIP IF ME3 = 9 OR EM2a = 9] In the newspaper? [SHOW: PRINTAD cleaned.GIF]
- d. [SKIP IF ME3 = 4 OR EM2a = 4] On the Internet? [SHOW: ONLINEBANNERAD.TIF]

- e. [SKIP IF ME3 = 10 OR EM2a = 10] On a billboard or transit ad? [SHOW: TRANSITAD1.jpg & TRANSITAD2.jpg]

	ON TV n=225	On the radio n=209	In the newspaper n=217	On the internet? n=226	On a billboard or transit? n=230
Yes	6%	14%	5%	9%	9%
No	94%	87%	95%	91%	91%
Total	100%	100%	100%	100%	100%

[IF MM1 = 2 and MM2a-e = 2 and EM2a <>4, 5, 6, 7, 8, 9, or 10 and ME3 <>4, 5, 6, 7, 8, 9, or 10, SKIP TO EV1]

MM3. In general, what effect would you say the advertising you saw had on your interest in Energy Upgrade California Program? Did it affect you interest... ...

	n=226
Positively	46%
Negatively or	0%
Did it not have an effect on your interest in the program	54%
Total	100%

MM8. What changes, if any, could be made to Energy Upgrade California advertising to increase your interest in the program? [MULTIPLE RESPONSE]

	n=226
More local/community events or advertising	1%
More large-scale/mass media advertising	3%
More creative/unique/memorable advertising	4%

More information and explanation of program in advertising	10%
More targeted advertising/advertise in utility bill	6%
Additional financial support for upgrades	1%
Issue with contractors/contractor restrictions	1%
Make it easier to sign up/contact program	3%
Highlight cost savings data	5%
More exposure/have never seen the ads	6%
None/No changes	22%
(Other)	2%
Don't know	41%

### Level 2: Education: Events/Workshops

[SKIP EV1A IF EM2A =2 OR ME3=2, SKIP EV1B IF EM2A =3 OR ME3=3]

EV1. Energy Upgrade California has also had representatives share information at community events and also hosted workshops to promote knowledge about energy efficiency equipment and programs. Have you heard anything about the program... [1=YES, 2=NO] [ROTATE]

- a. At a community event such as a farmer's market or community event?

	n=233
Yes	4%
No	96%
Total	100%

- b. At a workshop at a local library or municipal building?

	n=235
Yes	2%
No	98%

Total	100%
-------	------

[IF EV1A AND EV1B = 2, SKIP TO CM1]

(PROGRAMMER NOTE: SKIP TO CM1 ONLY if EV1A AND EV1B = 2.

IF EV1A = 1 and EV1b = 2, ASK EV2, SKIP EV3, ASK EV4 and EV5

IF EV1A = 2 and EV1b = 1, SKIP EV2, ASK EV3, ASK EV4 and EV5

IF EV1a = 1 and EV1b = SKIPPED and (EM2a=3 OR ME3 = 3), ask EV2-EV4

IF EV1a = SKIPPED and EV1b = 1 and (EM2a=2 OR ME3 = 2), ASK EV2-EV4

IF EV1a = SKIPPED and EV1b = SKIPPED and (EM2a=2,3 OR ME3 = 2 or 3), ASK EV2-EV40

[ASK EV2 IF EV1A=1 OR EM2A =2 OR ME3=2]

EV2. [IF ME3 = 2 OR EM2a = 2, READ-IN: "You mentioned that you heard about the Energy Upgrade California program at a farmer's market or community event."] At which farmer's markets or community event do you recall hearing about the program? [MULTIPLE RESPONSE]

	n=5
Danville Farmers Market	20%
Diablo Valley Farmers Market	40%
Walnut Creek Farmers Market	20%
The Concord Fall Home and Garden Show	20%
Don't Know	20%

	n=3
San Mateo Green Fair	33%
San Mateo Home Garden and Gourmet Show	33%
Burlingame Farmers Market	33%
San Carlos Art & Wine Festival	33%
Menlo Park Farmers Market	33%
Redwood City Farmers Market	33%

	n=5
San Jose Blossom Hill Farmers	20%

Market	
Sunnyvale Farmers Market	40%
Cupertino Diwali -Festival of Lights	20%
Los Altos Farmers Market	20%
Cupertino Farmers Market	20%
(Other)	60%

[ASK IF EV1B=1, OR EM2A=3 OR ME3=3]

EV3. [IF ME3 = 3 OR EM2A = 3, READ-IN: "You mentioned that you attended a workshop about the Energy Upgrade California program."] Where was the workshop that you attended where you heard about the program? [MULTIPLE RESPONSE]

	n=1
(Other)	100%
	100%

	n=2
Pacifica Community Center	50%
Don't Know	50%
	100%

	n=2
Sunnyvale Senior Center	50%
Saratoga Community Center	50%
Jewish Community Center of Silicon Valley	50%
Cupertino Community Hall	50%
San Jose Willow Glen Community Center	50%
Los Altos Shoup Park Garden House	50%

EM4. In general, what effect would you say your experience with the Energy Upgrade California representatives had on your interest in Energy Upgrade California Program? Did it affect your interest...

	n=15
Positively	47%
Did it not have an effect on your interest in the program	53%
Total	100%

EV5. Did you learn anything new about the Energy Upgrade California program from the information you received at these events, either the community event or the workshop?

	n=15
Yes	47%
No	53%
Total	100%

EV6.What did you learn? [OPEN END, MULTIPLE ANSWER]

	n=7
About program and rebates	86%
About conserving energy/efficiency	29%

### Contractor Marketing

[SKIP TO CM2 IF EM2A=1 OR ME3=1]

CM1. Do you remember hearing about or discussing the Energy Upgrade California program with a contractor?

	n=233
Yes	3%
No	97%
Total	100%

[ASK IF CM1 = 1 OR EM2A=1 OR ME3=1, ELSE SKIP TO TP1]

CM2. [READ IN IF ME3 = 1 OR EM2a = 1: “You mentioned that you heard of the Energy Upgrade California program through a contractor.”] How did the building contractor make you aware of the program? (MULTIPLE RESPONSE, UP TO 4)

	n=9
--	-----

Face-to-face discussion	56%
Door hanger	11%
A group talk or presentation	22%
(Other)	22%

CM3. In general, what effect would you say the contractor had on your interest in Energy Upgrade California Program? Did it affect your interest...

	n=9
Positively	56%
Did it not have an effect on your interest in the program	44%
Total	100%

CM4. Did you learn anything new about the Energy Upgrade California program from the information you got from the contractor?

	n=9
Yes	78%
No	22%
Total	100%

CM5. What did you learn? [OPEN END, MULTIPLE RESPONSE]

	n=7
How/what upgrades could improve home's efficiency	14%
How much upgrades will cost	14%
What rebates/incentives/reduced-code services are available	29%
About the program/energy efficiency (general)	29%
(Other)	43%

### Content Testing

#### Print Collateral Testing

[ROTATE MODULES: P1-P6, L1-L4, L5-L8, P7]

TP1. Now, we would like to show you some of the Energy Upgrade California program's print advertising and ask a few questions about it. [IF EM2 = 2, READ IN: "Please answer the following questions even if you haven't seen these materials before."]

**TP1. Print:** Please review this advertisement and then answer the short series of questions that follow.

[SHOW PG&E BROCHURE: PGEBROCHUREMERGED.GIF]

P1. Have you seen this brochure BEFORE it was shown to you here?

	n=235
Yes, I've seen this brochure	3%
No	97%
Total	100%

[ASK IF P1=2]

P2. Have you seen any advertisements similar to the brochure shown to you here (with the same logo)?

	n=229
Yes	4%
No	96%
Total	100%

P3. [IF P1 = 2 AND P2 = 2, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this message is attempting to get you to do? [OPEN END, MULTIPLE RESPONSE]

	n=235
Raise awareness/Become aware of the programs	10%
Spend money	10%
Get energy upgrades to home/Get home upgrades	33%
Improve home energy efficiency (general)	27%
Get an audit/evaluation of home energy use	8%

Save energy (general)	17%
Contact a contractor	6%
Contact Energy Upgrade California	4%
Consider getting an upgrade	7%
Get specific measures (e.g. insulation, fix airleaks, windows)	5%
Learn about two types of upgrade packages (basic and advanced)	3%
Sign up for program	8%
Save money on utility bills	11%
Incentives/rebates/loans available	12%
(Nothing)	3%
(Other)	2%
(Don't know)	3%
	167%

P4. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this brochure, I would be likely to seek out more information on this topic.

	n=235
0 - Strongly disagree	5%
1	4%
2	4%
3	5%
4	6%
5	15%
6	18%
7	12%
8	11%
9	8%
10 - Strongly agree	11%
Total	100%

- b. [IF PR1 = 1] The information in this brochure accurately reflects what I have experienced in the program.

	n=235
8	100%

- c. I understand the two types of upgrade packages presented in this brochure.

	n=235
0 - Strongly disagree	4%
1	1%
2	3%
3	4%
4	6%
5	11%
6	10%
7	17%
8	17%
9	14%
10 - Strongly agree	13%
Total	100%

P5. Now I would like for you to review the information on panel 1 (highlight) of this brochure. Please read each of these five sections. Now, on a scale of 0 to 10 where 0 means ‘not at all’ and 10 means ‘very much,’ how much do each of these five sections make you want to participate in the Energy Upgrade California program? [0-10]

- a. Incentives
- b. Lower bills
- c. Comfort
- d. Participating contractors
- e. The environment

	Incentives n=235	Lower Bills n=235	Comfort n=235	Participating contractors n=235	The environment n=235

0 - Not at all	2%	3%	3%	6%	6%
1	2%	1%	2%	6%	2%
2	1%	0%	3%	6%	3%
3	1%	1%	3%	7%	8%
4	3%	2%	4%	9%	3%
5	13%	9%	13%	17%	10%
6	7%	9%	15%	14%	10%
7	17%	15%	19%	14%	15%
8	23%	23%	18%	12%	19%
9	13%	15%	8%	5%	14%
10 - Very much	17%	21%	13%	4%	12%
Total	100%	100%	100%	100%	1%

P6. And of these five sections, which one is MOST LIKELY to make you want to participate?"

	n=235
Incentives	37%
Lower bills	49%
Comfort	6%
Participating contractors	1%
The environment	7%
Total	100%

#### LOCAL OUTREACH TESTING

[IF COUNTY = SAN MATEO, SHOW SMLOCALADMERGED.GIF,

IF COUNTY <> SAN MATEO, SKIP TO L3 AND L4]

L1. Have you ever seen this advertisement BEFORE it was shown to you here?

	n=64
Yes	5%
No	95%

L2. Have you seen any other advertisements or handouts similar to the advertisements shown to you here (with the same logo)?

	n=64
Yes	3%
No	97%

[ASK ALL]

SHOW SMLOCALADMERGED.GIF FOR L3 AND L4]

L3. Please look at the following informational handout. [IF L1 <> 1 AND L2 <> 1, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this handout is attempting to get you to do? [OPEN END]

	n=235
Get an audit/evaluation/review of energy use	40%
Become an energy ambassador	12%
Conserve/save energy	6%
Save money/lower bill	2%
Spread word to others in community/share experience	25%
Talk to friends and neighbors	9%
Need more information on costs	0%
Spend money	2%
Host a party	9%
Either get an assessment or become an ambassador	6%
Find ways to save/find out more about EE options	14%
Represent PG&E/do work for PG&E/become a sales person	5%
Contact a contractor/information about contractors	1%
Participate in the program/sign up	9%
(Positive comment/likes the message)	2%

(Negative comment/dislike the message)	5%
Nothing	5%
(Other)	2%
(Don't know)	2%

L4. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this handout, I would be likely to contact the program.

	n=235
0 - Strongly disagree	11%
1	6%
2	9%
3	8%
4	10%
5	17%
6	11%
7	10%
8	10%
9	3%
10 - Strongly agree	5%
Total	100%

- b. [IF SM1 = 1] The information in this handout accurately reflects what I have experienced in the program.

*No respondent qualified for this question.*

- c. I understand the information about the Personal Energy Review.

	n=235
0 - Strongly disagree	2%
1	0%
2	1%
3	1%
4	4%

5	9%
6	10%
7	14%
8	23%
9	17%
10 - Strongly agree	18%
Total	100%

- d. I understand the information about becoming an Energy Ambassador. [IF COUNTY = CONTRA COSTA, SHOW CCLOCALAD.GIF,

	n=235
0 - Strongly disagree	3%
1	1%
2	2%
3	1%
4	4%
5	14%
6	11%
7	14%
8	21%
9	17%
10 - Strongly agree	14%
Total	100%

IF COUNTY <> CONTRA COSTA, SKIP TO L7 AND L8]

L5. Have you ever seen this advertisement BEFORE it was shown to you here?

	n=58
Yes	3%
No	67%
Total	100%

L6. Have you seen any other advertisements or handouts similar to the advertisements shown to you here (with the same logo)?

	n=58
Yes	2%
No	98%
Total	100%

[ASK ALL, SHOW CCLOCALAD.GIF FOR L7 AND L8]

L7. Please look at the following informational handout. [IF L1 <> 1 AND L2 <> 1, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this handout is attempting to get you to do? [OPEN END, MULTIPLE RESPONSE]

	n=235
Get a loan/get financing	18%
Spend money/buy something	8%
Learn about the program/become aware/investigate program	9%
Contact contractor	4%
Save energy (general)	8%
Educes you about the program/options (general)	7%
Get EE home upgrades/make home more efficient	35%
Get home upgrade/improve home (general - does not mention EE specifically)	18%
Learn about ways to save energy	5%
Get rebates or incentives	18%
Get specific measures (insulation, duct sealing)	5%
Save money	6%
Sign up to participate/contact the program (general)	10%
(Positive comment)	2%
(Negative comment - dislike the messaging)	7%
(Nothing)	1%

(Other)	2%
(Don't know)	1%

L8. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this handout, I would be likely to contact the program.

	n=235
0 - Strongly disagree	12%
1	5%
2	6%
3	7%
4	7%
5	17%
6	12%
7	9%
8	12%
9	7%
10 - Strongly agree	6%
Total	100%

- b. [IF SM2 = 1] The information in this handout accurately reflects what I have experienced in the program.

*No respondent qualified for this question.*

- c. I understand the differences between each of the incentives listed.

	n=235
0 - Strongly disagree	3%
1	0%
2	4%
3	8%
4	5%
5	11%
6	12%

7	13%
8	24%
9	10%
10 - Strongly agree	9%
Total	100%

[ASK ALL]

P7. Now, looking back at the three types of advertisements, which of the three makes you MOST interested in seeking more information about the Energy Upgrade California program?

	n=235
The PG&E brochure	40%
The Energy Ambassador flyer	11%
The County incentives handout	33%
None of these make me want to contact the program.	16%
Total	100%

### Online Banner Testing

Now, we would like to show you some of the program's online advertising and ask a few questions about it.

**Online Banner:** Please review this advertisement and then answer the short series of questions that follow.

[SHOW ONLINEBANNERAD.TIF]

B1. Have you seen this advertisement on the Internet BEFORE taking this survey?

	n=213
Yes, I've seen this advertisement	9%
No	91%
Total	100%

[ASK IF B1=2]

B2. Have you seen any online advertisements similar to the advertisement shown to you here (that use the same logo)?

	n=213
Yes	2%
No	98%
Total	100%

B3. [READ-IN IF B1 AND B2 = 2: "Even if you haven't seen these advertisements before,"] What do you think this message is attempting to get you to do? [OPEN END]

	n=235
Get money/incentives	17%
Act now/act quickly	6%
Click on the ad	9%
Apply for rebates	8%
Get more information about program/incentives	17%
Contact program/PG&E	3%
Get EE upgrades for home	45%
Get limited-time-only additional incentives	5%
Insulate home	2%
Save money (general)	7%
Save energy (general)	8%
Don't trust ad	6%
Don't understand ad	4%
Spend money	9%
(Positive comment/like message)	0%
(Negative comment/dislike message)	8%
(Nothing)	1%
(Other)	1%
(Don't know)	2%
	158%

B4. Please rate your agreement with the following statement on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree'

- a. After viewing this advertisement, I would be likely to click on this banner ad to find out more information.

	n=235
0 - Strongly disagree	17%
1	8%
2	10%
3	8%
4	7%
5	14%
6	10%
7	10%
8	8%
9	3%
10 - Strongly agree	5%
Total	100%

### Website Testing

W1. Have you ever visited the Energy Upgrade California website, located at energyupgradeca.org? [SHOW EUCWEBSITE.jpg]

	n=235
Yes	3%
No	97%
Total	100%

[ASK IF W1 = 1]

W2. Thinking about the information available on the website, please rate your agreement with the following statements on a scale of 0 to 10, where 0 means 'strongly disagree' and 10 means 'strongly agree':

- a. The website gave me a good understanding of what the program offers.

	n=8
5	25%
6	25%
7	13%
8	25%
9	13%
Total	100%

- b. The information on the website is easy to understand.

	n=8
5	38%
7	25%
8	25%
9	13%
Total	100%

- c. [ASK IF PR1 = 1] The website accurately reflects what I experienced with the program.

	n=2
7	50%
8	50%
Total	100%

#### AKA-B

Please read each of the following statements. For these statements, please list of your level of agreement on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree.' For some questions, there is a choice of "Not applicable" available. Please select this option if you have already taken these actions.

AK1. Completing a comprehensive package of modifications to my home, including sealing leaky windows and doors, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances would lead to very deep savings. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=235
0 - Strongly disagree	1%
2	2%
3	6%
4	7%
5	8%
6	12%
7	14%
8	20%

9	7%
10 - Strongly agree	8%
NA/We or previous occupants have already taken these actions in our home	16%
Total	100%

AK2. I think my household should complete a package of improvements like those just described. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=235
0 - Strongly disagree	5%
1	1%
2	3%
3	5%
4	4%
5	15%
6	10%
7	11%
8	16%
9	7%
10 - Strongly agree	8%
NA/We or previous occupants have already taken these actions in our home	15%
Total	100%

[ROTATE AK3-AK11]

AK3. I feel that it is my job to do more to my home to reduce energy use significantly.

	n=235
0 - Strongly disagree	4%
1	1%
2	2%
3	3%
4	5%
5	15%

6	18%
7	15%
8	17%
9	11%
10 - Strongly agree	9%
Total	100%

AK4. [SKIP IF PR1 = 1] My household intends to complete a comprehensive package of modifications to our home to get deep reductions in energy use.

	n=232
0 - Strongly disagree	9%
1	9%
2	10%
3	8%
4	7%
5	19%
6	13%
7	9%
8	8%
9	3%
10 - Strongly agree	3%
99	4%
Total	100%
System	

AK5. Completing a whole package of home modifications that includes sealing areas around windows and door, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances *would significantly increase the comfort of a home.* [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=235
0 - Strongly disagree	2%
1	0%
2	2%
3	4%
4	4%

5	7%
6	17%
7	12%
8	20%
9	7%
10 - Strongly agree	10%
NA/We or previous occupants have already taken these actions in our home	15%
Total	100%

AK6. I am concerned enough about the environmental impacts of energy use that I would consider doing a comprehensive package of home modifications to help. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=235
0 - Strongly disagree	5%
1	3%
2	4%
3	6%
4	6%
5	14%
6	13%
7	12%
8	15%
9	6%
10 - Strongly agree	5%
NA/We or previous occupants have already taken these actions in our home	12%
Total	100%

AK7. My home has problems with drafts and cold or hot spots that my household would like to address. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=235
0 - Strongly disagree	6%
1	4%
2	9%

3	7%
4	8%
5	9%
6	9%
7	8%
8	13%
9	6%
10 - Strongly agree	10%
NA/We or previous occupants have already taken these actions in our home	11%
Total	100%

AK8. I would feel a little guilty about harming the environment if I didn't do all I could to my home to make it energy efficient.

	n=235
0 - Strongly disagree	8%
1	3%
2	6%
3	11%
4	7%
5	15%
6	14%
7	13%
8	12%
9	5%
10 - Strongly agree	7%
Total	100%

AK9. I'm really not sure what my home needs to be as energy efficient [or comfortable] as possible.

	n=235
0 - Strongly disagree	10%
1	6%
2	11%
3	11%

4	8%
5	14%
6	12%
7	12%
8	9%
9	3%
10 - Strongly agree	4%
Total	100%

AK10. I'm not sure whether my home is energy efficient or not. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=235
0 - Strongly disagree	12%
1	9%
2	13%
3	12%
4	10%
5	13%
6	14%
7	6%
8	6%
9	3%
10 - Strongly agree	2%
Total	100%

AK11. My household could save a lot of money on utility bills if we did a comprehensive package of home modifications (just described). [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=235
0 - Strongly disagree	4%
1	3%
2	4%
3	9%
4	9%
5	10%

6	12%
7	12%
8	15%
9	4%
10 - Strongly agree	6%
NA/We or previous occupants have already taken these actions in our home	12%
Total	100%

## Demographics

Now please answer some final questions about your household. Your responses are for statistical purposes only and will remain confidential.

D1. How many people currently live in your household year-round (more than nine months out of the year), including yourself? [NUMERIC OPEN END, 99 Prefer not to answer]

	n=235
1	5%
2	53%
3	19%
4	17%
5	4%
6	1%
Prefer not to answer	1%
Total	100%

[Skip if D1=1]

D2. How many children 18 and younger currently live in your household year-round (more than nine months out of the year)? [NUMERIC OPEN END, 99 Prefer not to answer]

	n=235
0	66%
1	15%
2	16%
3	3%
4	0%
Total	100%
System	

D7. How long have you lived in this home?

	n=235
One or two years	6%
3-5 years	9%
6-10 years	17%
11-20 years	33%
21-plus years	35%
Total	100%

D8. What is the approximate square footage of your home? (Your best guess is fine.) [NUMERIC OPEN END, 9999998 I don't know 9999999 Prefer not to answer]

	n=235
35	0%
750	0%
930	0%
1040	1%
1080	0%
1100	1%
1150	0%
1200	4%
1300	0%
1400	2%
1450	1%
1500	4%
1550	1%
1600	3%
1650	0%
1700	5%
1744	0%
1750	3%
1800	7%
1831	0%
1850	4%
1860	1%

1880	0%
1900	2%
1937	0%
1950	0%
1990	0%
2000	8%
2050	1%
2060	0%
2100	7%
2124	0%
2200	5%
2300	3%
2400	5%
2450	0%
2500	5%
2550	0%
2599	0%
2600	3%
2650	0%
2690	0%
2700	2%
2800	3%
3000	3%
3100	1%
3200	1%
3500	2%
3600	0%
4000	0%
4093	0%
4200	0%
4400	0%
4600	0%
4800	0%
6500	0%
Don't know	2%

Prefer not to answer	1%
Total	100%

[ASK IF D8 = DK OR REF, ELSE SKIP TO D11]

D9. How many floors does your home have?

	n=6
1	33%
2	50%
3 or more	17%
Total	100%

D10. How many bedrooms does your home have?

	n=6
3	67%
4	17%
5	17%
Total	100%

D11. What is the last level of education you completed?

	n=235
High school graduate	0%
Some collage/Vocational or technical school	12%
College graduate	32%
Post graduate education	56%
Total	100%

D12. In what year were you born? [NUMERIC OPEN END; 1900-1999]

	n=235
1933	0%
1934	0%
1935	0%
1936	0%
1937	1%

1938	1%
1939	0%
1940	1%
1941	1%
1942	0%
1943	1%
1944	2%
1945	1%
1946	3%
1947	2%
1948	3%
1949	3%
1950	3%
1951	3%
1952	3%
1953	3%
1954	2%
1955	4%
1956	6%
1957	4%
1958	2%
1959	3%
1960	3%
1961	3%
1962	3%
1963	4%
1964	3%
1965	4%
1966	1%
1967	3%
1968	2%
1969	1%
1970	1%
1971	1%
1972	3%

1973	2%
1974	3%
1975	0%
1977	0%
1978	2%
1982	1%
1983	1%
Prefer not to answer	4%
Total	100%

D13. Which of the following best describes your race or ethnicity?

	n=235
White or Caucasian	78%
Black or African American	0%
American Indian or Alaska Native	0%
Hispanic, Mexican, Latino, Puerto Rican, or other Hispanic	3%
Chinese	9%
Indian or South Asian	0%
Other Asian or Pacific Islander	3%
Mixed or multi-racial	2%
(Other)	1%
Prefer not to answer	2%
Total	100%

D14. What is your zip code? [NUMERIC OPEN END]

	n=235
93611	0%
93704	1%
93711	1%
93728	0%
94002	2%
94010	4%
94015	2%
94018	0%

94019	1%
94022	1%
94023	0%
94024	2%
94025	2%
94028	1%
94030	2%
94037	0%
94040	2%
94043	1%
94044	1%
94061	2%
94062	0%
94065	0%
94066	1%
94070	3%
94080	1%
94085	0%
94086	3%
94087	4%
94401	0%
94402	1%
94403	1%
94404	0%
94506	0%
94507	1%
94511	0%
94517	1%
94518	0%
94519	1%
94521	0%
94523	1%
94526	0%
94528	0%
94549	1%

94553	1%
94556	3%
94561	0%
94563	1%
94583	3%
94595	0%
94596	1%
94597	0%
94598	3%
94803	1%
94805	1%
95008	1%
95014	1%
95030	2%
95032	1%
95035	1%
95037	0%
95046	0%
95050	1%
95051	0%
95070	2%
95112	1%
95117	1%
95118	1%
95119	0%
95120	5%
95121	1%
95123	3%
95124	2%
95125	4%
95128	0%
95134	0%
95136	3%
95602	0%
95650	0%

95678	0%
98005	0%
Prefer not to answer	1%
Total	100%

### Closing

Those are the last of our questions. Thanks for your help with this survey! Your responses will greatly help customers save energy and money in the future for California.

## 5.2.2. Workshop Participants

### Screeners

X1. Is your household currently a customer of PG&E?

	n= 81
Yes	100%

[ASK IF WS\_MONTH AND WS\_CITY <> BLANK]

X2. Did you recently attend an Energy Upgrade California program informational workshop located in [WS\_CITY] in [WS\_MONTH][WS\_YEAR]?

	n=66
Yes	97%
No, I attended the workshop at a different location	3%
Total	100%

[ASK IF WS\_MONTH = BLANK AND WS\_CITY<>BLANK]

X2a. Did you recently attend an Energy Upgrade California program informational workshop located in [WS\_CITY]?

	n=81
Yes	100%

[ASK IF WS\_CITY = BLANK AND VS\_MONTH <>BLANK]

X2b. Did you recently attend an Energy Upgrade California program informational workshop in [WS\_MONTH][WS\_YEAR]?

*No respondent qualified for this question*

[ASK IF WS\_CITY AND WS\_MONTH = BLANK]

X2c. Did you recently attend an Energy Upgrade California program informational workshop?

	n=81
Yes	100%

[ASK IF X2 = 2 OR X2A = 2 OR X2B = 1 OR 3 OR X2C = 1, ELSE SKIP TO X4]

X3. Where did you attend the workshop? [OPEN END]

	n=5
San Carlos	60%
(Other)	40%
Total	100%

[ASK IF X2 = 3 OR X2A = 1 OR 2 OR X2B = 3 OR X2C = 1, ELSE SKIP TO US1]

X4. When did you attend the workshop? Please provide the month and year only. [OPEN END]

	n=15
September 2011	13%
October 2011	47%
November 2011	13%
(Other)	27%
Total	100%

### Exposure to EUC Messaging

First, I have some questions about the types of media you may be exposed to.

US1. About how many hours per week do you . . .

- a. Watch TV [NUMERIC OPEN END, 0-99]
- b. Surf the Internet [NUMERIC OPEN END, 0-99]
- c. Listen to radio, not counting satellite radio [NUMERIC OPEN END, 0-99]

	Watch TV n=81	Surf the Internet n=81	Listen to radio, not counting satellite radio n=81
0	10%	0%	10%
1	4%	3%	10%
2	4%	9%	14%
3	5%	4%	6%
4	1%	0%	9%

5	9%	4%	14%
6	7%	0%	0%
7	1%	1%	6%
8	4%	6%	3%
9	0%	1%	1%
10	16%	14%	12%
12	6%	1%	3%
14	3%	6%	1%
15	5%	10%	5%
20	14%	19%	3%
21	3%	3%	0%
22	1%	0%	0%
23	1%	0%	0%
24	0%	1%	0%
25	0%	5%	1%
30	1%	4%	3%
36	1%	0%	0%
40	3%	4%	0%
45	1%	0%	0%
50	1%	1%	0%
60	0%	3%	0%
70	0%	0%	1%
80	0%	3%	0%
99	0%	1%	0%
Total	100%	100%	100%

[IF US1B>0]

US2. Will you list 3 publicly accessible websites that you frequently (on a daily or weekly basis) go to? [OPEN END, MULTIPLE RESPONSE]

	n=81
Google	53%
Yahoo (general)	38%
Facebook	30%
CNN	7%
AOL	5%
ESPN	4%
Amazon	10%

eBay	1%
Twitter	1%
Weather website (Weather Channel, Weather Underground, etc.)	3%
NY Times	6%
Other national news (NPR, Washington Post, etc.)	15%
International news (BBC, etc.)	1%
Local news (sfgate.com, San Jose Mercury News, KGO, etc.)	20%
Schools and universities	3%
LinkedIn	6%
Email (MSN, Hotmail, Comcast, Gmail, Yahoo mail, etc.)	9%
Craigslist	9%
Other social networking website (Pinterest, etc.)	6%
Brick-and-mortar retailer or distributor website (Macy's, Neiman Marcus, Lowes, etc.)	1%
Bank website	4%
Finance website (stocks, eTrade, etc.)	4%
Local group/interest website	5%
Local sports website (SFGiants, etc.)	1%
Deal-of-the-day websites (Groupon, Living Social, Woot, etc.)	3%
Video/music streaming website (Netflix, Hulu)	5%
None	3%
(Other)	21%

US3. How often do you read the newspaper (paper copy not online news)?

	n=81
Every day	36%
Four to six times per week	7%
One to three times per week	14%
Less than once a week	25%
Never	19%

Total	100%
-------	------

ME1. Where did you FIRST learn about the Energy Upgrade California workshop you attended?

	n=81
A contractor	4%
Farmer's market or community event	16%
Internet ad	9%
Email	22%
Direct mailing to your home, by mail, or a door hanger	11%
Radio ad	5%
Television ad	1%
Newspaper ad	10%
Billboard or transit ad	1%
Mentioned by family member, friend, co-worker or neighbor	17%
(Other)	4%
Total	100%

ME1a. Did you also learn about where and when the workshop was going to be held from this same source?

	n=81
Yes	83%
No	17%
Total	100%

[ASK IF ME1A = 2]

EM1. Where did you FIRST get information about where and when that workshop was going to be held?

	n=14
Farmer's market or community event	7%
Email	14%
Direct mailing to your home, by mail, or a door hanger	14%

Mentioned by family member, friend, co-worker or neighbor	7%
Website/online (not ad-specific)	57%
Total	100%

EM2. Had you heard of Energy Upgrade California before learning about the workshop?

	n=81
Yes	31%
No	69%
Total	100%

[ASK IF EM2 = 1, ELSE SKIP TO PR1]

EM2a. Where did you first learn about Energy Upgrade California?

	n=25
A contractor	4%
Farmer's market or community event	20%
Internet ad	8%
Email	8%
Radio ad	12%
Television ad	8%
Newspaper ad	4%
Billboard or transit ad	4%
Mentioned by family member, friend, co-worker or neighbor	24%
(Other)	4%
(Don't know)	4%
Total	100%

ME3. Where ELSE have you heard about Energy Upgrade California, if anywhere? Select all that you recall. [MULTIPLE RESPONSE, UP TO 7]

	n=25
A contractor	8%
Farmer's market or community event	8%
Internet ad	32%
Email	16%

Direct mailing to your home, by mail, or a door hanger	16%
Radio ad	12%
Television ad	28%
Newspaper ad	12%
Billboard or transit ad	4%
Mentioned by family member, friend, co-worker or neighbor	20%
Nowhere else	20%
(Other)	4%

ME4. What does the phrase “Energy Upgrade California” mean to you? [OPEN END, MULTIPLE RESPONSE]

	n=81
Save energy/energy efficiency/energy conservation	61%
Rebates	22%
Equipment upgrades	19%
Cost savings for energy efficiency	15%
Clean/new energy	4%
“Green”	4%
Related to home/house	33%
Related to California/state government working together to improve efficiency	16%
(Other)	5%
Don’t know/Can’t think of any	4%

ME5. What do you think are the main benefits of the Energy Upgrade California program? [OPEN END, 96 None, MULTIPLE RESPONSE]

	n=81
Rebates/incentives/makes upgrades more affordable	37%
Saving money on utility bill	38%
Saving energy/being more efficient	47%
Raises awareness/educates consumer on efficiency options	21%

Energy audit by qualified professional	11%
Increased comfort in home	15%
(Other)	6%
98	1%

### Participant Project Status

PR1. Have you signed up to get a home upgrade through Energy Upgrade California?

	n=81
Yes	31%
No	69%
Total	100%

[ASK IF PR1 = 1, ELSE SKIP TO SM1]

PR2. Has a contractor come to your home to conduct an energy assessment to see if you qualify for incentives for home energy upgrades?

	n=25
Yes	96%
No	4%
Total	100%

[ASK IF PR2 = 1, ELSE SKIP TO SM1]

PR3. What is the status of the home energy upgrades that you may receive an incentive for?

	n=24
The work on my home is complete	25%
The work is in progress	17%
The work has not started yet	17%
Not sure if I want to continue	17%
Not sure if my home qualifies	25%
Total	100%

PR4. On a scale from 0-10, where 0 is “not at all influential” and 10 is “very influential”, how influential was the workshop on your decision to participate in the program?

	n=24
5	21%

6	8%
7	8%
8	4%
9	17%
10 - Very influential	42%
Total	100%

[ASK IF PR4<7]

PR5. Please explain why you gave that rating ?

	n=7
(Other)	100%
Total	100%

[ASK IF COUNTY\_CODE = 4]

SM1. Have you ever heard of the Energy Ambassadors program?

	n=81
Yes	5%
No	95%
Total	100%

[ASK IF SM1 = 1, ELSE SKIP TO BAR1]

SM2. Have you signed up to participate in the Energy Ambassadors program?

	n=81
No	100%
Total	100%

SM3. How did you hear about the Energy Ambassadors program? Please select all that apply.

	n=1
Community event	100%
Total	100%

SM4. Have you hosted any Energy Ambassador parties at your home?

	n=81
No	100%
Total	100%

[ASK IF SM4 = 1, ELSE SKIP TO BAR1]

SM5. Approximately how many total people have attended the Energy Ambassador parties at your home? [NUMERIC OPEN END]

*No respondent qualified for this question.*

#### BARRIERS TO PARTICIPATION

[ASK PR1 = 2]

BAR1. Which of the following BEST describes why you haven't signed up for any home upgrades?

	n=56
The initial cost is too high.	34%
I haven't had time.	18%
I haven't found a contractor yet.	13%
I need more information about the program.	2%
My home doesn't need any of the upgrades sponsored by the program.	9%
Cannot get financing to cover the project cost.	9%
Rent/did not qualify for the program	14%
(Other)	2%
Total	100%

[ASK IF BAR1 = 1, ELSE SKIP TO BAR3]

BAR2. Other than cost, are there any other reasons you have not yet signed up for any home upgrades? (MULTIPLE RESPONSE, UP TO 5)

	n=16
I haven't had time to contact them.	25%
I haven't found a contractor yet.	25%

I need more information about the program.	6%
My home doesn't need any of the upgrades sponsored by the program.	6%
(No)	25%
(Other)	13%
Total	100%

BAR3. What could the program do to help you sign up for upgrades? [OPEN END] [96=Nothing]

### LEVEL 2.1 – EDUCATION – WORKSHOPS

EM4. In general, what effect would you say the Energy Upgrade California workshop had on your interest in Energy Upgrade California Program? Did it affect your interest...

	n=81
Positively	78%
Negatively or	6%
Did it not have an effect on your interest in the program	16%
Total	100%

WS5. Did you learn anything new about the Energy Upgrade California program from the information you received at these workshops?

	n=81
Yes	86%
No	14%
Total	100%

WS6.What did you learn? [OPEN END, MULTIPLE RESPONSE]

	n=70
About the program (general)	29%
About the available rebates/incentives/financing options	40%
About the upgrade options/cost of upgrades	19%
About energy efficiency/how to make home efficient/fix problems	26%

About saving money on utility bills through energy upgrades	3%
About the contractors/options for getting work done	26%
About the steps of the process, home inspection, etc	20%
(Other)	4%
(Don't know/can't remember)	1%

### Marketing Exposure Battery

Now we have some questions about what you have heard about the Energy Upgrade California program.

#### Level 1: Awareness: Mass Media Advertising

[ASK ALL]

MM1. Do you remember seeing, hearing or reading any advertisements during the past 12 months for the Energy Upgrade California program [IF EM2a or ME3 = 4, 5, 6, OR 8, READ IN: "other than those you have already selected"]?

	n=81
Yes	54%
No	46%
Total	100%

[ASK IF MM1 = 1, ELSE SKIP TO MM2]

MM5. If possible, please list any advertising slogans or messages you can recall for Energy Upgrade California. [OPEN END]

	n=44
"Don't miss the window" (Whole or part)	2%
"Did you know that if you do several home energy improvements at once you can achieve greater energy savings?" (Who	2%
"Reduce energy use. Save money. Create jobs." (Whole or part)	2%
Rebates or Incentives (General)	7%

Lower bill" (General)	2%
The environment/saving energy (general)	5%
(Can recall how saw ad but not specific messaging)	27%
Mention of ad featuring the home being sick	7%
None/Don't remember	46%
(Other)	5%

MM7. Please name any organizations that you believe sponsor the Energy Upgrade California program. A best guess is fine. [OPEN END, MULTIPLE RESPONSE]

	n=44
PG&E	68%
SMUD	2%
SCE/SoCal Edison/Edison	5%
SCG/The Gas Company/SoCal Gas	2%
CPUC/PUC (California Public Utilities Commission)	5%
State of California (general)	7%
California Energy Commission	9%
City/county government	23%
Other utility or energy provider	5%
Other non-profit	2%
Other government organization	7%
(Other)	7%
Don't know	9%

MM2. Do you recall seeing or hearing any of the ads for the program ... [1 = Yes, 2 = No] [ROTATE]

a. [SKIP IF EM2A=7 or ME3 = 7] On TV? [EMBED: 1\_ENERGIZED ENG 30-no logos.mov]

	n=72
Yes	15%
No	85%
Total	100%

- b. [SKIP IF EM2A=6 or ME3 = 6] On the radio? [EMBED: StopWaste.org\_H-House\_Radio\_30\_MIX\_042811.mp3]

	n=75
Yes	25%
No	75%
Total	100%

- c. [SKIP IF EM2A=8 or ME3 = 8] In the newspaper? [SHOW: PRINTAD cleaned.GIF]

	n=77
Yes	21%
No	79%
Total	100%

- d. [SKIP IF EM2A=3 or ME3 = 3] On the Internet? [SHOW: ONLINEBANNERAD.TIF]

	n=73
Yes	16%
No	84%
Total	100%

- e. [SKIP IF EM2A=9 or ME3 = 9] On a billboard or transit ad? [SHOW: TRANSITAD1.jpg & TRANSITAD2.jpg]

	n=79
Yes	29%
No	71%
Total	100%

[IF MM1 = 2 and MM2a-e = 2 and EM2a <> 3, 4, 5, 6, 7, 8, or 9 and ME3 <>3, 4, 5, 6, 7, 8, or 9, SKIP TO M1]

MM3. In general, what effect would you say the advertising you saw had on your interest in Energy Upgrade California Program? Did it affect your interest...

	n=61
Positively	57%

Negatively or	2%
Did it not have an effect on your interest in the program	41%
Total	100%

MM8. What changes, if any, could be made to Energy Upgrade California advertising to increase your interest in the program?

	n=61
More local/community events or advertising	8%
More large-scale/mass media advertising	10%
More creative/unique/memorable advertising	5%
More information and explanation of program in advertising	12%
More targeted advertising/advertise in utility bill	10%
Additional financial support for upgrades	5%
Issue with contractors/contractor restrictions	7%
None/No changes	31%
(Other)	3%
Don't know	26%

## Level 2: Education: Representatives at Community Events

[SKIP TO M2 IF EM2A=2 OR ME3=2]

M1. Energy Upgrade California has also had representatives attend community events to share information about energy efficiency equipment and programs. Have you heard anything about the program at a community event such as a farmer's market or trade show?

	n=76
Yes	26%
No	74%
Total	100%

[IF M1 = 2, SKIP TO CM1]

M2. [IF EM2A=2 or ME3 = 2, READ-IN: "You mentioned that you heard about the Energy Upgrade California program at a farmer's market or community event."] At which farmer's markets or community event do you recall hearing about the program?

	n=25
San Jose Home Show	12%
El Cerrito Farmers Market	8%
Big Fresno Fair	8%
San Mateo Green Fair	8%
Granite Bay Farmers Market	4%
Los Gatos Farmers Market	4%
San Mateo Farmers Market	4%
Pacifica Fogfest	4%
San Mateo Home Garden and Gourmet Show	4%
Walnut Creek Farmers Market	4%
Redwood City Farmers Market	4%
San Ramon Farmers Market	4%
Clovis Farmers Market	4%
Point Richmond Farmers Market	4%
The Concord Fall Home and Garden Show	4%
San Jose Blossom Hill Farmers Market	4%
The Kaiser Farmers Market (Walnut Creek)	4%
(Other)	12%

M4. In general, what effect would you say the event had on your interest in Energy Upgrade California Program? Did it affect your interest...

	n=25
Positively	80%
Negatively or	4%
Did it not have an effect on your interest in the program	16%
Total	100%

M5. Did you learn anything new about the Energy Upgrade California program from the information you received at these events?

	n=25
Yes	60%
No	40%
Total	100%

### Contractor Marketing

[SKIP TO CM2 IF EM2A=1 OR ME3=1]

CM1. Do you remember hearing about or discussing the Energy Upgrade California program with a contractor?

	n=78
Yes	45%
No	55%
Total	100%

[ASK IF CM1 = 1 OR EM2A=1 OR ME3=1, ELSE SKIP TO P1]

CM2. [READ IN IF EM2A=1 or ME3 = 1: "You mentioned that you heard of the Energy Upgrade California program through a contractor."] How did the building contractor make you aware of the program? (MULTIPLE RESPONSE, UP TO 4)

	n=38
Face-to-face discussion	50%
Door hanger	3%
A group talk or presentation	58%
(Other)	5%

CM3. In general, what effect would you say the contractor had on your interest in Energy Upgrade California Program? Did it affect your interest...

	n=38
Positively	79%
Negatively or	5%
Did it not have an effect on your interest in the program	16%

Total	100%
-------	------

CM4. Did you learn anything new about the Energy Upgrade California program from the information you got from the contractor?

	n=38
Yes	61%
No	40%
Total	100%

CM5. What did you learn? [OPEN END]

	n=22
How/what upgrades could improve home's efficiency	36%
How much upgrades will cost	14%
What rebates/incentives/reduced-cost services are available	36%
About the program/energy efficiency (general)	36%
(Other)	5%

## Content Testing

### Print Collateral Testing

[ROTATE MODULES: P1-P6, L1-L4, L5-L8, P7]

TTP1. Now, we would like to show you some of the program's print advertising and ask a few questions about it. For the purposes of these questions, please disregard any location-specific information you see in these materials. [INSERT SCREEN BREAK]

**TP1. Print:** Please review this advertisement and then answer the short series of questions that follow.

[SHOW PG&E BROCHURE: PGEBROCHUREMERGED.GIF]

P1. Have you seen this brochure BEFORE it was shown to you here?

	n=81
Yes, I've seen this brochure	28%
No	72%
Total	100%

**[ASK IF P1=2]**

P2. Have you seen any advertisements similar to the brochure shown to you here (with the same logo)?

	n=58
Yes	33%
No	67%
Total	100%

P3. [IF P1 = 2 AND P2 = 2, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this message is attempting to get you to do? [OPEN END, MULTIPLE RESPONSE]

	n=81
Raise awareness/Become aware of the programs	17%
Become more energy efficient (general)	6%
Spend money	4%
Get energy upgrades to home/Get home upgrades	40%
Improve home energy efficiency (general)	16%
Get an audit/evaluation of home energy use	9%
Save energy (general)	1%
Contact a contractor	9%
Consider getting an upgrade	6%
Get specific measures (e.g. insulation, fix airleaks, windows)	3%
Learn about two types of upgrade packages (basic and advanced)	3%
Sign up for program	16%
Save money on utility bills	7%
Incentives/rebates/loans available	31%
(Other)	4%

P4. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this brochure, I would be likely to seek out more information on this topic.

	n=81
0 - Strongly disagree	3%
1	1%
2	1%
3	5%
4	6%
5	16%
6	11%
7	11%
8	21%
9	11%
10 - Strongly agree	14%
Total	100%

- b. [IF PR1 = 1] The information in this brochure accurately reflects what I have experienced in the program.

	n=25
2	4%
3	4%
4	8%
5	4%
6	8%
7	20%
8	12%
9	20%
10 - Strongly agree	20%
Total	100%

- c. I understand the two types of upgrade packages presented in this brochure.

	n=81
1	3%
2	1%

3	3%
4	1%
5	5%
6	16%
7	11%
8	22%
9	12%
10 - Strongly agree	26%
Total	100%

P5. Now I would like for you to review the information on panel 1 (highlight) of this brochure. Please read each of these five key benefits of participating in the program. Now, on a scale of 0 to 10 where 0 means 'not at all' and 10 means 'very much,' how much do each of these five benefits make you want to participate in the Energy Upgrade California program? [0-10]

- a. Incentives
- b. Lower bills
- c. Comfort
- d. Participating contractors
- e. The environmental benefits

	Incentives	Lowering bills	Comfort	Participating contractors	The environmental benefits
	n=81	n=81	n=81	n=81	n=81
0 - Not at all	1%	1%	3%	9%	3%
1	1%	1%	0%	1%	0%
2	0%	0%	1%	5%	1%
3	3%	3%	3%	9%	6%
4	3%	3%	6%	5%	6%
5	1%	1%	6%	19%	10%
6	5%	10%	9%	12%	14%
7	15%	10%	17%	17%	14%
8	21%	19%	20%	9%	11%
9	19%	24%	16%	5%	16%
10 - Very much	32%	30%	20%	10%	20%

Total	100%	100%	100%	100%	100%
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P6. And of these five benefits, which one MOST makes you want to participate in the program?

	n=81
Incentives	49%
Lower bills	31%
Comfort	10%
The environmental benefits	10%
Total	100%

#### LOCAL OUTREACH TESTING

[IF COUNTY = SAN MATEO, SHOW SMLOCALADMERGED.GIF,

IF COUNTY <> SAN MATEO, SKIP TO L3 AND L4]

L1. Have you ever seen this advertisement BEFORE it was shown to you here?

	n=21
Yes	5%
No	95%
Total	100%

L2. Have you seen any other advertisements or handouts similar to the advertisements shown to you here (with the same logo)?

	n=81%
No	100%
Total	100%

[ASK ALL]

SHOW SMLOCALADMERGED.GIF FOR L3 AND L4]

L3. Please look at the following informational handout. [IF L1 <> 1 AND L2 <> 1, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this handout is attempting to get you to do? [OPEN END]

	n=81
Get an audit/evaluation/review of	33%

energy use	
Become an energy ambassador	10%
Conserve/save energy	4%
Save money/lower bill	3%
Spread word to others in community/share experience	11%
Talk to friends and neighbors	10%
Spend money	1%
Host a party	9%
Either get an assessment or become an ambassador	14%
Find ways to save/find out more about EE options	6%
Represent PG&E/Do work for PG&E/become a sales person	11%
Contact a contractor/information about contractors	3%
Participate in the program/sign up	6%
(Positive comment/likes the message)	7%
(Negative comment/Dislike the messaging)	10%
(Other)	3%

L4. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this handout, I would be likely to contact the program.

	n=81
0 - Strongly disagree	4%
1	6%
2	9%
3	7%
4	6%
5	20%
6	11%
7	14%
8	11%
9	6%

10 - Strongly agree	6%
---------------------	----

- b. [IF SM1 = 1] The information in this handout accurately reflects what I have experienced in the program.

	n=81
5	100%

- c. I understand the information about the Personal Energy Review.

	n=81
0 - Strongly disagree	1%
2	1%
3	4%
4	1%
5	10%
6	6%
7	17%
8	24%
9	15%
10 - Strongly agree	21%
Total	100%

- d. I understand the information about becoming an Energy Ambassador. [IF COUNTY = CONTRA COSTA, SHOW CCLOCALAD.GIF,

	n=81
0 - Strongly disagree	1%
1	1%
2	1%
3	3%
4	6%
5	9%
6	11%
7	22%
8	20%
9	9%

10 - Strongly agree	17%
Total	100%

[IF COUNTY <> CONTRA COSTA, SKIP TO L7 AND L8]

L5. Have you ever seen this advertisement BEFORE it was shown to you here?

	n=26
Yes	31%
No	69%
Total	100%

L6. Have you seen any other advertisements or handouts similar to the advertisements shown to you here (with the same logo)?

	n=26
Yes	27%
No	73%
Total	100%

[ASK ALL, SHOW CCLOCALAD.GIF FOR L7 AND L8]

L7. Please look at the following informational handout. [IF L5<> 1 AND L6 <> 1, READ-IN: "Even if you haven't seen messaging like this before,"] What do you think this handout is attempting to get you to do? [OPEN END, MULTIPLE RESPONSE]

	n=81
Get a loan/get financing	12%
Spend money/buy something	4%
Learn about the program/become aware/investigate program	9%
Contact contractor	7%
Save energy (general)	4%
Educates you about the program/options (general)	16%
Get EE home upgrades/make home more energy efficient	21%
Get home upgrade/Improve home (general - does not mention EE specifically)	7%

Learn about ways to save energy	4%
Get rebates or incentives	37%
Get specific measures (insulation, duct sealing)	1%
Save money	6%
Sign up to participate/contact the program (general)	20%
(Positive comment)	1%
(Negative comment/Dislike the messaging)	7%

L8. Please rate your agreement with the following statements on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree': [ROTATE]

- a. After viewing this handout, I would be likely to contact the program.

	n=81
0 - Strongly disagree	4%
1	1%
2	1%
3	7%
4	5%
5	15%
6	17%
7	16%
8	19%
9	5%
10 - Strongly agree	10%
Total	100%

- b. [IF SM2 = 1] The information in this handout accurately reflects what I have experienced in the program.

*No respondent qualified for this question.*

- c. I understand the differences between each of the incentives listed.

	n=81
0 - Strongly disagree	1%
2	1%

3	7%
4	5%
5	11%
6	15%
7	12%
8	21%
9	11%
10 - Strongly agree	15%
Total	100%

[ASK ALL]

P7. Now, looking back at the three types of advertisements, which of the three makes you MOST interested in seeking more information about the Energy Upgrade California program?

	n=81
The PG&E brochure	44%
The Energy Ambassador flyer	12%
The County incentives handout	37%
None of these make me want to contact the program.	6%
Total	100%

### Online Banner Testing

Now, we would like to show you some of the program's online advertising and ask a few questions about it.

**Online Banner:** Please review this advertisement and then answer the short series of questions that follow.

[SHOW ONLINEBANNERAD.TIF]

B1. Have you seen this advertisement on the Internet BEFORE taking this survey?

	n=81
Yes, I've seen this advertisement	16%
No	84%
Total	100%

[ASK IF B1=2]

B2. Have you seen any online advertisements similar to the advertisement shown to you here (that use the same logo)?

	n=68
Yes	9%
No	91%
Total	100%

B3. [READ-IN IF B1 AND B2 = 2: "Even if you haven't seen these advertisements before,"] What do you think this message is attempting to get you to do? [OPEN END, MULTIPLE RESPONSE]

	n=81
Get money/incentives	21%
Act now/act quickly	11%
Click on the ad	22%
Apply for rebates	7%
Get more information about program/incentives	19%
Contact program/PG&E	9%
Get EE upgrades for home	35%
Get limited-time-only additional incentives	9%
Save money (general)	7%
Save energy (general)	1%
Don't trust ad	5%
Don't understand ad	7%
Spend money	5%
(Negative comment/dislike message)	7%
(Other)	3%
(Don't know)	4%

B4. Please rate your agreement with the following statement on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree'

- a. After viewing this advertisement, I would be likely to click on this banner ad to find out more information.

	n=81
0 - Strongly disagree	9%

1	6%
2	4%
3	17%
4	6%
5	10%
6	12%
7	11%
8	9%
9	7%
10 - Strongly agree	9%
Total	100%

### Website Testing

W1. Have you ever visited the Energy Upgrade California website, located at energyupgradeca.org? [SHOW EUCWEBSITE.jpg]

	n=81
Yes	73%
No	27%
Total	100%

[ASK IF W1 = 1]

W2 Thinking about the information available on the website, please rate your agreement with the following statements on a scale of 0 to 10, where 0 means 'strongly disagree' and 10 means 'strongly agree':

- a. The website gave me a good understanding of what the program offers.

	n=59
0 - Strongly disagree	2%
2	2%
3	3%
4	2%
5	5%
6	10%
7	19%
8	29%

9	10%
10 - Strongly agree	19%
Total	100%

- b. The information on the website is easy to understand.

	n=59
0 - Strongly disagree	2%
2	3%
3	5%
4	2%
5	5%
6	10%
7	22%
8	20%
9	14%
10 - Strongly agree	17%
Total	100%

- c. [ASK IF PR1 = 1] The website accurately reflects what I experienced with the program.

	n=20
0 - Strongly disagree	5%
2	15%
3	5%
4	5%
5	10%
6	5%
7	5%
8	30%
9	10%
10 - Strongly agree	10%
Total	100%

#### AKA-B

Please read each of the following statements. For these statements, please list of your level of agreement on a scale of 0 to 10 where 0 means 'strongly disagree' and 10 means 'strongly agree.' For some questions, there is a choice of "Not applicable" available. Please select this option if you have already taken these actions.

AK1. Completing a comprehensive package of modifications to my home, including sealing leaky windows and doors, insulating walls and attics, insulating all hot water systems, and using all high-efficiency appliances would lead to very deep savings. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=81
0 - Strongly disagree	1%
1	1%
3	5%
4	9%
5	4%
6	6%
7	16%
8	21%
9	15%
10 - Strongly agree	16%
NA/We or previous occupants have already taken these actions in our home	6%
Total	100%

AK2. I think my household should complete a package of improvements like those just described in these materials. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=81
0 - Strongly disagree	4%
2	3%
4	1%
5	7%
6	9%
7	14%
8	20%
9	14%
10 - Strongly agree	20%
NA/We or previous occupants have already taken these actions in our home	10%
Total	100%

[ROTATE AK3-AK11]

AK3. I feel that it is my job to do more to my home to reduce energy use significantly.

	n=81
0 - Strongly disagree	3%
1	1%
2	3%
3	1%
4	4%
5	4%
6	14%
7	14%
8	30%
9	7%
10 - Strongly agree	21%
Total	100%

AK4. [ASK IF PR1 = 1] My household intends to complete a comprehensive package of modifications to our home to get deep reductions in energy use.

	n=56
0 - Strongly disagree	5%
1	7%
2	7%
3	5%
4	7%
5	18%
6	14%
7	13%
8	11%
9	9%
10 - Strongly agree	4%
Total	100%

AK5. Completing a whole package of home modifications that includes sealing areas around windows and doors, insulating walls and attics, insulating all hot water systems, and using all

high-efficiency appliances *would significantly increase the comfort of a home.* [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=81
0 - Strongly disagree	1%
1	1%
2	5%
3	1%
4	6%
5	9%
6	12%
7	15%
8	15%
9	26%
NA/We or previous occupants have already taken these actions in our home	9%
Total	100%

AK6. I am concerned enough about the environmental impacts of energy use that I would consider doing a comprehensive package of home modifications to help. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=81
0 - Strongly disagree	1%
1	3%
2	5%
3	5%
4	7%
5	16%
6	11%
7	11%
8	16%
9	7%
10 - Strongly agree	9%

NA/We or previous occupants have already taken these actions in our home	9%
Total	100%

AK7. My home has problems with drafts and cold or hot spots that my household would like to address. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=81
0 - Strongly disagree	5%
1	6%
2	5%
4	1%
5	4%
6	10%
7	9%
8	15%
9	19%
10 - Strongly agree	19%
NA/We or previous occupants have already taken these actions in our home	9%
Total	100%

AK8. I would feel a little guilty about harming the environment if I didn't do all I could to my home to make it energy efficient.

	n=81
0 - Strongly disagree	5%
1	6%
2	5%
3	6%
4	7%
5	19%
6	9%
7	14%
8	15%
9	10%

10 - Strongly agree	5%
Total	100%

AK9. I'm really not sure what my home needs to be as energy efficient [or comfortable] as possible.

	n=81
0 - Strongly disagree	16%
1	7%
2	10%
3	7%
4	4%
5	14%
6	4%
7	10%
8	19%
9	4%
10 - Strongly agree	6%
Total	100%

AK10. I'm not sure whether my home is energy efficient or not. [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=81
0 - Strongly disagree	27%
1	10%
2	10%
3	9%
4	5%
5	10%
6	4%
7	1%
8	12%
9	9%
10 - Strongly agree	4%
Total	100%

AK11. My household could save a lot of money on utility bills if we did a comprehensive package of home modifications . [0-10, 96 NA/We or previous occupants have already taken these actions in our home]

	n=81
0 - Strongly disagree	5%
1	1%
2	4%
3	5%
4	6%
5	7%
6	10%
7	14%
8	20%
9	10%
10 - Strongly agree	11%
NA/We or previous occupants have already taken these actions in our home	7%
Total	100%

## Demographics

Now please answer some final questions about your household. Your responses are for statistical purposes only and will remain confidential.

D17. Which of the following counties do you currently live in?

	n=81
Contra Costa	31%
Fresno	6%
Placer	4%
San Mateo	28%
Santa Clara	26%
Alameda	3%
(Other)	3%
Total	100%

D1. How many people currently live in your household year-round (more than nine months out of the year), including yourself? [NUMERIC OPEN END, 99 Prefer not to answer]

	n=81
1	5%
2	40%
3	15%
4	21%
5	5%
6	1%
Prefer not to answer	14%
Total	100%

[Skip if D1=1]

D2. How many children 18 and younger currently live in your household year-round (more than nine months out of the year)? [NUMERIC OPEN END, 99 Prefer not to answer]

	n=77
0	53%
1	14%
2	18%
4	3%
Prefer not to answer	12%
Total	100%

D3. Do you own or rent your home?

	n=81
Own	93%
Rent	6%
Prefer not to answer	1%
Total	100%

D4. Which of the following types of housing units would you say best describes your home? Is it a..?

	n=81
Single-family detached house	89%

Single-family attached house (townhouse, row house, excluding duplex)	7%
Apartment building with 2 or more units	3%
Prefer not to answer	1%
Total	100%

D5. Does your home have central air conditioning and/or central heat?? Please select all that apply. [MULTIPLE RESPONSE]

	n=81
Yes - central air conditioning	48%
No - central air conditioning or heating	12%
Yes - central heating	79%
Prefer not to answer	1%

D6. In what year was your home built?

	n=81
2008 to 2012	1%
2001 to 2007	3%
1991 to 2000	4%
1981 to 1990	11%
1971 to 1980	20%
1961 to 1970	19%
1951 to 1960	17%
1941 to 1950	12%
1940 or earlier	11%
Prefer not to answer	3%
Total	100%

D7. How long have you lived in this home?

	n=81
One or two years	24%
3-5 years	20%
6-10 years	6%

11-20 years	19%
21-plus years	26%
Prefer not to answer	6%
Total	100%

D8. What is the approximate square footage of your home? (Your best guess is fine.) [NUMERIC OPEN END, 9999998 I don't know 99999999 Prefer not to answer]

	n=81
800	1%
900	1%
1000	5%
1050	1%
1060	1%
1100	5%
1200	5%
1204	1%
1248	1%
1250	1%
1300	3%
1350	1%
1355	1%
1400	3%
1500	3%
1550	1%
1600	3%
1650	3%
1670	1%
1700	1%
1750	4%
1780	1%
1800	6%
1900	5%
1922	1%
1930	1%
2000	7%

2060	1%
2100	4%
2152	1%
2200	3%
2300	1%
2400	3%
2500	3%
2800	1%
3000	3%
3300	1%
3600	1%
4300	1%
4400	1%
4500	1%
4540	1%
Don't know	1%
Prefer not to answer	5%
Total	100%

[ASK IF D8 = DK OR REF, ELSE SKIP TO D11]

D9. How many floors does your home have?

	n=5
1	40%
2	40%
Prefer not to answer	20%
Total	100%

D10. How many bedrooms does your home have?

	n=5
3	20%
4	40%
Prefer not to answer	40%
Total	100%

D11. What is the last level of education you completed?

	n=81
Some collage/Vocational or technical school	12%
College graduate	37%
Post graduate education	44%
Prefer not to answer	6%
Total	100%

D12. In what year were you born? [NUMERIC OPEN END; 1900-1999]

	n=81
1939	3%
1942	1%
1943	1%
1945	1%
1946	3%
1947	1%
1948	3%
1949	1%
1950	1%
1951	3%
1952	4%
1953	6%
1955	1%
1956	1%
1958	4%
1959	1%
1962	3%
1964	4%
1965	3%
1966	3%
1967	3%
1969	1%
1970	3%
1971	3%
1972	3%
1973	1%
1974	5%

1975	1%
1976	3%
1977	4%
1982	1%
1983	1%
1987	1%
Prefer not to answer	26%
Total	100%

D13. Which of the following best describes your race or ethnicity?

	n=81
White or Caucasian	54%
Hispanic, Mexican, Latino, Puerto Rican, or other Hispanic	3%
Chinese	11%
Indian or South Asian	5%
Other Asian or Pacific Islander	4%
Mixed or multi-racial	1%
(Other)	1%
Prefer not to answer	21%
Total	100%

D14. What is your zip code? [NUMERIC OPEN END]

	n=81
93611	1%
93705	1%
93720	1%
93723	1%
93727	1%
94002	3%
94019	3%
94022	1%
94025	4%
94028	1%
94044	7%
94062	4%

94063	1%
94066	1%
94087	1%
94115	1%
94402	1%
94403	1%
94404	1%
94507	1%
94509	1%
94526	3%
94530	1%
94536	1%
94561	1%
94563	4%
94565	3%
94582	1%
94583	1%
94596	3%
94801	3%
94804	1%
94805	1%
94806	1%
95008	1%
95030	1%
95032	1%
95035	1%
95037	1%
95051	1%
95070	1%
95112	3%
95116	1%
95123	1%
95124	3%
95125	1%
95129	3%
95135	1%

95148	1%
95603	3%
95630	1%
95746	1%
Prefer not to answer	10%
Total	100%

D15. Which of the following best describes your current employment status?

	n=81
Employed Full Time	54%
Employed Part Time	9%
Not Employed, Currently Seeking Employment	10%
Not Employed, Not Seeking Employment	1%
Retired	17%
Prefer not to answer	9%
Total	100%

D16. Which of the following best represents your annual household income from all sources in 2011, before taxes? Was it ...

	n=81
Under \$25,000	1%
\$25,000 to \$34,999	3%
\$35,000 to \$49,999	6%
\$50,000 to \$74,999	20%
\$75,000 to \$99,999	14%
\$100,000 to \$124,999	9%
\$125,000 to \$149,999	3%
Over \$150,000	12%
Prefer not to answer	33%
Total	100%

## Closing

Those are the last of our questions. Thanks for your help with this survey! Your responses will greatly help customers save energy and money in the future for California. Please enter the name address where you would like us to mail your check:

We are doing research throughout the year to help the program grow to more homes. We may contact you again in a few months to further explore your program experience. On behalf of the state of California, thank you very much for your time and help with this study!

## 6. ON-SITE INSPECTION REPORTS

This appendix contains sample reports from on-site inspections conducted as part of the EUC Whole-House Program.



## ASW ENGINEERING MANAGEMENT CONSULTANTS

February 29, 2012

To: Bob Tingleff  
SBW Consulting

From: Dennis Rowan, PE  
ASW Engineering

Re: Energy Upgrade California - Site 1 – 1057, Home Inspection Memo, Revision 1

Dear Bob,

The site visit was conducted on December 19, 2011 by Dennis Rowan of ASW Engineering accompanied by Russel Bayba and Steve Mann, representatives from Build It Green. The goals of the site visit were:

1. Verify installation of measures.
2. Collect sufficient data to enable running the EnergyPro software, and to compare the input parameters and model results with those of the contractor.
3. Conduct a blower-door test, and compare the results with those of the contractor.
4. Conduct a duct-leakage test, and compare the results with those of the contractor.
5. Conduct appropriate Combustion Appliance Zone (CAZ) Safety tests.

### **Summary of Findings**

All measures were found to have been installed. Significant discrepancies were found between model input parameters used by the contractor and the actual values found on site. Blower door tests results differed significantly from those reported by the contractor. It is expected that the program will require the contractor to take measures to reduce building leakage. In other respects contractor-reported results were confirmed.

### **Energy Summary**

Energy	Existing	Improved	Savings	% Saved
Submitted kWh	10,780	9,534	1,246	11.6%
Verified kWh	6,844	6,354	490	7.2%
Submitted Therms	1,945	942	1,003	48.4%
Verified Therms	1,452	883	569	39.2%
Submitted kBtu/ft <sup>2</sup> -yr	55.60	30.47	25.13	45.2%
Verified kBtu/ft <sup>2</sup> -yr	80.27	52.37	27.89	34.7%

Results from the modified model dimensional inputs, and altered inputs for attic insulation and building leakage resulted in a verified energy savings lower than that submitted by the contractor. After the contractor reduces the building leakage and these values are retested, these savings numbers can be expected to improve.

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## ASW ENGINEERING MANAGEMENT CONSULTANTS

### **Building Construction vs. Modeled**

The floor plan of the home was measured and compared with the square footage represented in the EnergyPro model. The actual floor area was found to be about half of that presented in the modeled home. The reason for this can be seen in the setup of the model. The model shows the home set up as two separate spaces, the upstairs and down stairs each with a raised floor and a roof. Since each is shown with the entire house square footage, the model doubled the square footage of the home thinking that each zone had its own floor and roof thereby being a separate entity instead of being stacked.

The upstairs roof was split into two separate sections. One was a vaulted area over the master bedroom that was not improved in any way. The other was an attic space that was partly used for storage and contained the heating unit. These two separate roof areas needed to be modeled as separate roof types and their areas apportioned appropriately. The vaulted area needed to be excluded from any improvements associated with the attic insulation. The vaulted roof also contained skylight area which was not included in the model provided.

The lighting schedule was original modeled as an office building schedule. ASW modeled the space as Family Dining down stairs and Dormitory upstairs. These designations are not extremely significant. The EnergyPro tool selections are not directly applicable to single family dwellings.

### **Attic Insulation**

In the attic space, the insulation was improved by blowing insulation around the perimeter and then pushing three inch batting against the blown-in insulation at the perimeter of the storage space. The bottom line is that there was approximately 50% of the space that was not improved and I estimate the average overall insulation of the attic is now R-24.6. ASW created an attic space with an R value of 24.6 and covered the non-vaulted area of the roof with this roof.

It is not likely that the attic insulation will be improved due to the nature of the storage space in the attic and the homeowner's use of that space for storage of their belongings.

### **HVAC System**

The HVAC system identified in the model was found installed in the home and the proper entries in the modeling software were confirmed. There were no entries found for the air system in the HVAC unit modeling. These inputs were entered as standard flows and sizes would dictate. The unit was modeled with a maximum CFM of 1,600 and a 0.5 HP motor utilizing a drive system with 97% efficiency.

### **HVAC Duct Leakage**

The HVAC duct leakage identified in the model was found during the home inspection. Duct Blaster testing confirmed this result. The proper entries in the modeling software were confirmed. No changes were made with respect to the HVAC system in the modeling software as a result of the site inspection regarding the duct leakage.

### **HVAC Duct Insulation**

The HVAC duct insulation identified in the model was found during the home inspection. Site inspection confirmed this result. The proper entries in the modeling software were confirmed. No changes were made with respect to the duct system in the modeling software as a result of the site inspection regarding the duct insulation.

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## ASW ENGINEERING MANAGEMENT CONSULTANTS

### **Building Leakage**

The building leakage identified in the model was tested using a Blower Door. This test was not able to reach the 50 Pascal (Pa) threshold of pressure in the house required for a proper Blower Door test. Our testing only reached 40.6 Pa. The total building leakage at 40.6 PA was measured at 6,143 CFM. This is significantly greater than the reported value of 3,635 CFM at 50 Pa. It can only be inferred that the total leakage of this house at 50 Pa would have been higher than the measured value of 6,143 CGF measured at 40.6 Pa. The estimating feature of the DG-700 was not activated during the Blower Door test and there was no CFM50 estimate generated by the DG-700 to use in this comparison. ASW's model uses the 6,143 CFM measured at 40.6 Pa for the inspection results as the "Test-Out" results of the inspection. Actual CFM50 building leakage can be expected to be greater than this value.

### **Domestic Hot Water System**

The domestic hot water system identified in the model was found installed in the home and the proper entries in the modeling software were confirmed. No changes were made with respect to the domestic hot water system in the modeling software as a result of the site inspection.

### **Summary of Resulting Site Energy Savings**

Measure	Submitted % Savings (cumulative)	Submitted % Savings (by measure)	Verified % Savings (cumulative)	Verified % Savings (by measure)
Roof Insulation	12.0%	12.0%	0.7%	0.7%
Building Leakage	18.0%	6.0%	0.7%	0.0%
HVAC Duct Leakage	29.5%	11.5%	15.5%	14.8%
HVAC Duct Insulation	34.6%	5.1%	20.3%	4.8%
HVAC System	40.9%	6.3%	29.0%	8.7%
Domestic Hot Water	45.2%	4.3%	34.8%	5.8%
Total Site Energy Savings	45.2%	45.2%	34.8%	34.8%

Dennis Rowan, PE  
ASW Engineering



## ASW ENGINEERING MANAGEMENT CONSULTANTS

March 5, 2012

To: Bob Tingleff  
SBW Consulting

From: Dennis Rowan, PE  
ASW Engineering

Re: Energy Upgrade California - Site 2 – 1058, Home Inspection Memo, Revision 1

Dear Bob,

The site visit was conducted on December 20, 2011 by Dennis Rowan of ASW Engineering accompanied by Russel Bayba, representative from Build It Green. The goals of the site visit were:

1. Verify installation of measures.
2. Collect sufficient data to enable running the EnergyPro software, and to compare the input parameters and model results with those of the contractor.
3. Conduct a blower-door test, and compare the results with those of the contractor.
4. Conduct a duct-leakage test, and compare the results with those of the contractor.
5. Conduct appropriate Combustion Appliance Zone (CAZ) Safety tests.

### **Summary of Findings**

A small gas leak was detected under the house between the gas meter and the furnace. All measures were found to have been installed. Some discrepancies were found between model input parameters used by the contractor and the actual values found on site. Attic insulation was not consistently uniform resulting in a de-rating to the installed R-value of the insulation. HVAC duct leakage tests results differed significantly from those reported by the contractor. In other respects contractor-reported results were generally confirmed.

### **Energy Summary**

Energy	Existing	Improved	Savings	% Saved
Submitted kWh	7,130	6,619	511	7.2%
Verified kWh	7,469	7,163	306	4.1%
Submitted Therms	1,266	820	446	35.2%
Verified Therms	1,151	819	332	28.8%
Square footage	Submitted	1,960	Verified	2,211
Submitted kBtu/ft <sup>2</sup> -yr	77.01	53.36	23.64	30.7%
Verified kBtu/ft <sup>2</sup> -yr	63.59	48.10	15.49	24.4%

Results from the modified model dimensional inputs, and altered inputs for attic insulation and duct leakage resulted in a verified energy savings lower than that submitted by the contractor. If the contractor reduces the duct leakage and these values are retested, these savings numbers can be expected to improve.

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## ASW ENGINEERING MANAGEMENT CONSULTANTS

### **Building Construction vs. Modeled**

The floor plan of the home was measured and compared with the square footage represented in the EnergyPro model. The actual floor area was found to be similar to that presented in the modeled home. There were differences in the setup of the different areas of the home.

On the ground floor, there were two floor types depicted in the model appropriately as crawlspace and slab, but their square footages were not depicted as found during the verification site visit. The slab was measured about the same while the crawlspace area was reduced by about 350 square feet. There were two roof types associated with the first floor which were not depicted in the modeling. One was a vaulted area over the living room and dining room that was not improved in any way. The remainder was a separate area over the kitchen and hallway. Other parameters of the first floor were found to be modeled within reason.

The upstairs roof was split into two separate sections. One was a vaulted area over the master bedroom that was not improved in any way. The remainder was a separate area over the remainder of the second floor. The minimum number of roof types on the second floor is two, one for the vaulted and one for the attic space. These two separate roof areas needed to be modeled as separate roof types and their areas apportioned appropriately. The vaulted area needed to be excluded from any improvements associated with the attic insulation. The vaulted roof also contained skylight area which was not included in the model provided. Other parameters of the second floor were found to be modeled within reason.

The lighting schedule was original modeled as Multi-Family. ASW did not alter this setting. These designations are not extremely significant. The EnergyPro tool selections are not directly applicable to single family dwellings.

### **Attic Insulation**

In the attic space, the insulation was improved by blowing insulation around the spaces and an improvement is achieved through an even distribution of the insulating material. Since the insulation was not uniformly distributed, the insulating factor was de-rated to R-25. ASW created an attic space with an R value of 25.0 and covered the non-vaulted area of the roof with this roof.

It is possible that the attic insulation will be improved by the contractor during a follow up site visit after the BIG review is complete.

### **HVAC System**

The HVAC system identified in the model was found installed in the home and the proper entries in the modeling software were confirmed. There were no entries found for the air system in the HVAC unit modeling. These inputs were entered as standard flows and sizes would dictate. The 18% duct leakage is based on the new 80,000 Btu furnace and  $0.0217 \text{ CFM/Btu} = 1,736 \text{ CFM}$  total for the duct system which is then divided into the measured leakage of 306 CFM. The unit was modeled with a 0.5 HP motor utilizing a drive system with 97% efficiency.

### **HVAC Duct Leakage**

The HVAC duct leakage identified in the model was tested during the home inspection. Duct Blaster testing measured more than double what was reported in the model. The proper entries in the modeling software were adjusted to the ASW tested values.



## ASW ENGINEERING MANAGEMENT CONSULTANTS

### HVAC Duct Insulation

The HVAC duct insulation identified in the model was found during the home inspection. Site inspection confirmed this result. The proper entries in the modeling software were confirmed. No changes were made with respect to the duct system in the modeling software as a result of the site inspection regarding the duct insulation.

### Building Leakage

The building leakage identified in the model was tested using a Blower Door. The ASW CFM50 test measured 3,654 where the model reported 3,160 CFM50. This difference is not extreme and does not cause ASW any concern regarding this particular measurement. ASW's model uses the 3,654 CFM measured at 50 Pa for the inspection results as the "Test-Out" results of the inspection.

### Domestic Hot Water System

The domestic hot water system identified in the model was found installed in the home and the proper entries in the modeling software were confirmed. No changes were made with respect to the domestic hot water system in the modeling software as a result of the site inspection.

### Summary of Resulting Site Energy Savings

Measure	Submitted % Savings (cumulative)	Submitted % Savings (by measure)	Verified % Savings (cumulative)	Verified % Savings (by measure)
Roof Insulation	5.9%	5.9%	3.6%	3.6%
Building Leakage	10.7%	4.8%	7.0%	3.4%
HVAC Duct Leakage	15.6%	4.9%	7.3%	0.3%
HVAC Duct Insulation	21.0%	5.4%	13.0%	5.7%
HVAC System	28.0%	7.0%	21.4%	8.4%
Domestic Hot Water	30.7%	2.7%	24.4%	3.0%
Total Site Energy Savings	30.7%	30.7%	24.4%	24.4%

Dennis Rowan, PE  
ASW Engineering



## ASW ENGINEERING MANAGEMENT CONSULTANTS

March 18, 2012

To: Bob Tingleff  
SBW Consulting

From: Dennis Rowan, PE  
ASW Engineering

Re: Energy Upgrade California - Site 3 – 1059, Home Inspection Memo

Dear Bob,

The site visit was conducted on February 24, 2012 by Dennis Rowan of ASW Engineering accompanied by Russell Bayba and Steve Mann, representatives from Build It Green. The goals of the site visit were:

1. Verify installation of measures.
2. Collect sufficient data to enable running the EnergyPro software, and to compare the input parameters and model results with those of the contractor.
3. Conduct a blower-door test, and compare the results with those of the contractor.
4. Conduct a duct-leakage test, and compare the results with those of the contractor.
5. Conduct appropriate Combustion Appliance Zone (CAZ) Safety tests.

### **Summary of Findings**

There was a floor insulation installation issue identified during the field verification. The issue was located under the floor inside the crawlspace. It appears that the insulation needs to be removed due to incorrect installation. No credit has been given for this installation. This is a fire safety issue for the homeowner. See Appendix-A for additional details. All other measures were found to have been installed. The duct system is newly installed and there was no claimed savings in the existing EnergyPro model for this measure. The ASW model includes this measure as it was found installed.

A small gas leak was detected under the house between the gas meter and the furnace. The homeowner was notified of this gas leak. Some discrepancies were found between model input parameters used by the contractor. In other respects contractor-reported results were generally confirmed.

### **Energy Summary**

Energy	Existing	Improved	Savings	% Saved
Submitted kWh	4,375	4,335	40	0.9%
Verified kWh	4,375	4,327	48	1.1%
Submitted Therms	722	283	439	60.8%
Verified Therms	722	325	397	55.0%
Square footage	Submitted	1,304	Verified	1,304
Submitted kBtu/ft <sup>2</sup> -yr	66.82	33.05	33.77	50.5%
Verified kBtu/ft <sup>2</sup> -yr	66.82	36.25	30.57	45.7%

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## ASW ENGINEERING MANAGEMENT CONSULTANTS

Results from the modified model inputs resulted in verified energy savings that differ from those submitted by the contractor. The removal of the floor insulation reduced the energy savings, the addition of the duct sealing and duct insulation did not increase the energy savings since the measure added fan energy consumption. The system has improved comfort conditions in the home.

### **Building Construction vs. Modeled**

The floor plan of the home was measured and compared with the square footage represented in the EnergyPro model. The actual floor area was found to be similar to that presented in the modeled home. There were only minor differences in the setup of the different areas of the home.

The major difference was the removal of the insulation from the crawlspace and the addition of the duct system. No baseline fan system was installed and the new fan system is modeled in the post installation model.

The lighting schedule was original modeled as office. ASW altered this setting to dormitory living quarters. These designations are not extremely significant. The EnergyPro tool selections are not directly applicable to single family dwellings.

### **Attic Insulation**

In the attic space, the insulation was improved by blowing insulation around the spaces and an improvement is achieved through an even distribution of the insulating material. Since the insulation was uniformly distributed, the insulating factor was approved at R-38.

### **Floor Insulation**

Floor insulation not installed correctly and needs to be removed. Since the insulation is not installed correctly, no credit should be given for this installation. This is a safety issue for the homeowner. Only the back room outside the crawlspace that has expanded foam insulation between the joists is counted for savings.

### **Wall Insulation**

The Wall Insulation identified in the model was found installed in the home and the proper entries in the modeling software were confirmed.

### **HVAC System**

The HVAC system identified in the model was found installed in the home and the proper entries in the modeling software were confirmed.

### **HVAC Duct Leakage**

There were no entries found for the air system leakage in the provided HVAC unit modeling. These inputs were entered by ASW as automatic modeling for the baseline conditions due to the lack of data. The ASW model uses 29 CFM25 for the duct leakage which equates to 2.2%. The 2.2% duct leakage is based on the new 60,000 Btu furnace and  $0.0217 \text{ CFM/Btu} = 1,302 \text{ CFM}$  total for the duct system which is then divided into the measured leakage of 29 CFM. The unit was modeled with a 0.5 HP motor utilizing a drive system with 97% efficiency. The HVAC duct leakage identified in the model was verified during the home inspection.



## ASW ENGINEERING MANAGEMENT CONSULTANTS

### HVAC Duct Insulation

There were no entries found for the duct system in the provided HVAC unit modeling. The HVAC duct insulation was added to the model by ASW. Site inspection confirmed the insulation of the new ducting.

### Building Leakage

The building leakage identified in the model was tested using a Blower Door. The ASW CFM50 test measured 1,560 where the model reported 1,700 CFM50. ASW's model uses the 1,560 CFM measured at 50 Pa for the inspection results as the "Test-Out" results of the inspection.

### Domestic Hot Water System

The domestic hot water system identified in the model was found installed in the home and the proper entries in the modeling software were confirmed. No changes were made with respect to the domestic hot water system in the modeling software as a result of the site inspection.

### Summary of Resulting Site Energy Savings

Measure	Submitted % Savings (cumulative)	Submitted % Savings (by measure)	Verified % Savings (cumulative)	Verified % Savings (by measure)
Roof Insulation	3.7%	3.7%	3.7%	3.7%
Wall Insulation	20.6%	16.9%	20.6%	16.9%
Floor Insulation	29.4%	8.8%	22.2%	1.6%
Building Leakage	31.3%	1.9%	24.7%	2.5%
HVAC Duct Leakage	31.3%	0.0%	24.7%	0.0%
HVAC Duct Insulation	31.3%	0.0%	24.7%	0.0%
HVAC System	37.0%	5.7%	32.1%	7.4%
Domestic Hot Water	50.6%	13.6%	45.7%	13.6%
Total Site Energy Savings	50.6%	50.6%	45.7%	45.7%

It can be seen from the model results that the addition of the duct system did not improve the energy signature of the residence directly and EnergyPro did not calculate any energy savings for this measure. The system improves occupant comfort and is an improvement to the dwelling which allows a more efficient heating system to be installed.

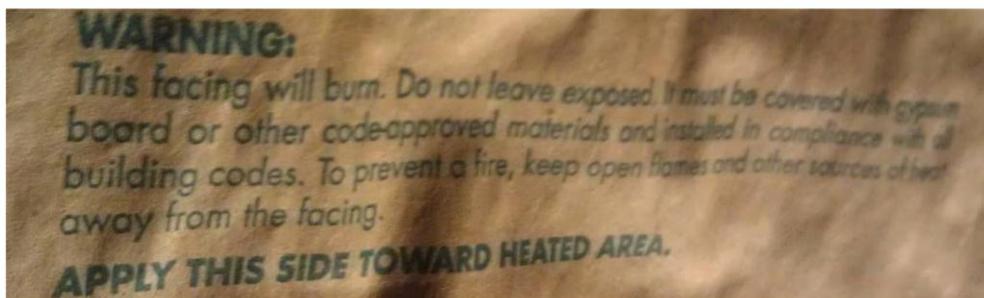
Dennis Rowan, PE  
ASW Engineering



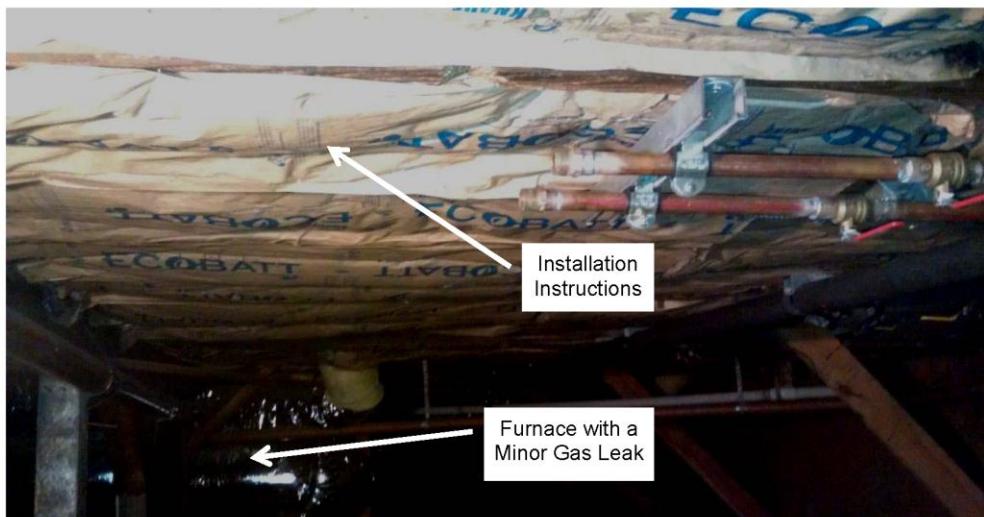
## ASW ENGINEERING MANAGEMENT CONSULTANTS

### Appendix – A

The insulation under the floor in the crawlspace is installed so that the paper backing of the batts is exposed to the dirt under the house. This is an incorrect installation as this paper is flammable and is not intended to be installed in this type of space. This type of batting is intended for walls where it is installed with the paper facing the heated space and the paper is then covered by the drywall inside of the living space. The picture below shows the writing on the batting that states the intended installation for these batts.



The entire floor of the home inside the crawlspace is covered in this manner. This installation poses a fire danger to the homeowner and this batting should be removed and new insulation should be placed correctly to insulate the floor of this home. Insulation with a non-flammable exposed surface should be installed in spaces where the insulation is exposed as it is with this installation.



A minor gas leak was detected at the furnace using the gas leak detector. A soap bubble solution indicated a very slow bubble. There was a developing bubble and it was steady.

Additionally, the paper is intended to be installed towards the conditioned space of the home since the opposite side of the paper acts as a vapor barrier. With this vapor barrier on the bottom of the joists, moisture will be trapped inside the fiberglass batts degrading the insulating effect and leading to deterioration of the joists and the sub floor. Mold can develop over time due to this type of installation.

The ASW model does not include this insulation measure as it is recommended that this insulation is removed. It can be added back into the model if properly installed.

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## ASW ENGINEERING MANAGEMENT CONSULTANTS

March 20, 2012

To: Bob Tingleff  
SBW Consulting

From: Dennis Rowan, PE  
ASW Engineering

Re: Energy Upgrade California - Site 4 – 1060, Home Inspection Memo Revision 1

Dear Bob,

The site visit was conducted on February 24, 2012 by Dennis Rowan of ASW Engineering accompanied by Russell Bayba and Steve Mann, representatives from Build It Green. The goals of the site visit were:

1. Verify installation of measures.
2. Collect sufficient data to enable running the EnergyPro software, and to compare the input parameters and model results with those of the contractor.
3. Conduct a blower-door test, and compare the results with those of the contractor.
4. Conduct a duct-leakage test, and compare the results with those of the contractor.
5. Conduct appropriate Combustion Appliance Zone (CAZ) Safety tests.

### Summary of Findings

No gas leaks were detected at the house. Some discrepancies were found between model input parameters used by the contractor and the dimensions of the house. The resulting energy consumption calculated in the EnergyPro model was only reduced slightly as a result of these modeling modifications. These differences were not large. In general, contractor-reported results were generally confirmed.

### Energy Summary

Energy	Existing	Improved	Savings	% Saved
Submitted kWh	5,883	5,592	291	4.9%
Verified kWh	5,975	5,743	232	3.9%
Submitted Therms	903	625	278	30.8%
Verified Therms	836	599	237	28.3%
Square footage	Submitted	1,384	Verified	1,500
Submitted kBtu/ft <sup>2</sup> -yr	79.75	58.95	20.80	26.1%
Verified kBtu/ft <sup>2</sup> -yr	69.33	53.00	16.33	23.6%



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## ASW ENGINEERING MANAGEMENT CONSULTANTS

Results from the modified model inputs resulted in verified energy savings that differ from those submitted by the contractor. While the adjustments to the model increased the energy savings, the end result is reasonably neutral with regard to overall energy savings.

### **Building Construction vs. Modeled**

The floor plan of the home was measured and compared with the square footage represented in the EnergyPro model. The total floor area was found to be similar to that presented in the modeled home. There were differences in the setup of the different areas of the home. These differences were incorporated in the ASW model and the impact was minimal.

The major difference was the separation of the home into four different areas that comprised the various zones. By separating these different spaces, their varying construction could be isolated and entered into the model. It became apparent through the process that these modifications made only minor adjustments to the results of the savings calculated and as such had little impact on the energy usage results.

The lighting schedule was original modeled as office. ASW altered this setting to dormitory living quarters for the bedrooms and multifamily for the downstairs living areas. These designations are not extremely significant. The EnergyPro tool selections are not directly applicable to single family dwellings.

### **HVAC System**

The new HVAC system identified in the model was found installed in the home and the proper entries in the modeling software were confirmed.

### **HVAC Duct Leakage**

There were entries found for the baseline air system leakage in the provided HVAC unit modeling. These inputs were entered by ASW as the baseline conditions. The ASW model uses 69 CFM25 for the verified duct leakage which equates to 5.3%. The 5.3% duct leakage is based on the new 60,000 Btu furnace and  $0.0217 \text{ CFM/Btu} = 1,302 \text{ CFM}$  total for the duct system which is then divided into the measured leakage of 69 CFM. The unit was modeled with a 0.5 HP motor utilizing a drive system with 97% efficiency. The HVAC duct leakage identified in the model was tested during the home inspection.

### **HVAC Duct Insulation**

The new duct system identified in the model was found installed in the home and the proper entries in the modeling software were confirmed.



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## ASW ENGINEERING MANAGEMENT CONSULTANTS

### Summary of Resulting Site Energy Savings

Measure	Submitted % Savings (cumulative)	Submitted % Savings (by measure)	Verified % Savings (cumulative)	Verified % Savings (by measure)
HVAC Duct Leakage	11.9%	11.9%	8.4%	8.4%
HVAC Duct Insulation	17.9%	6.0%	15.5%	7.1%
HVAC System	26.1%	8.2%	23.6%	8.1%
Total Site Energy Savings	26.1%	26.1%	23.6%	23.6%

Dennis Rowan, PE  
ASW Engineering