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# *Draft Research Plan*

## **LIEE 2009-2010 Process Evaluation**

### *Funded By:*

**California Public Utilities Commission,  
Pacific Gas and Electric,  
Southern California Edison,  
Southern California Gas,  
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**RESEARCH PLAN LIEE PROCESS EVALUATION**



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**RESEARCH PLAN LIEE PROCESS EVALUATION**

# 1

## INTRODUCTION

This document is the Research Plan for the 2009-2010 process evaluation of the Low Income Energy Efficiency (LIEE) program operated by the four investor-owned utility (IOU) companies of California for the California Public Utilities Commission (CPUC).

The LIEE program provides no-cost energy-related services to low-income households in California. The complementary objectives of the LIEE program are to provide an energy resource for California through energy savings, while reducing low-income customers' energy bills. Some of the energy-related services include home weatherization, refrigerator replacement, repair and replacement of heating and air conditioning equipment, and distribution of compact fluorescent light (CFL) bulbs. In addition, the program provides information and education that promotes energy efficiency practices.

The program is mature; it has been in operation for many years. The last process evaluation was conducted for the 2001 program year in 2002-2003. This 2009-2010 process evaluation was requested by the CPUC to focus on issues of enrollment and expansion as the LIEE seeks to serve all eligible and willing low-income households by 2020, a goal set forth in the *California Energy Efficiency Strategic Plan* (CEESP).

### PROCESS EVALUATION OBJECTIVES

The request for proposals and our response to it suggested that we would provide an assessment of the value of the program's recruitment and enrollment approaches; specifically, the Whole Neighborhood Approach (WNA) was to be compared to more conventional approaches to recruitment. However, this comparison will not be the target of this project, as we have learned that specific WNA strategies are not being used in a manner that permits such a comparison across the four utilities. In fact, based on the project initiation meetings held on August 12, 2010 and August 25, 2010, it is clear that no recruitment approaches have been implemented in such a manner as to permit comparison of one set of methods to another set of methods. Each of the utilities reports using a wide range of methods (many of the same methods) and may not be able to pinpoint which method led to a participant's engagement with the program.

To address the key objective of *assessing recruitment and improving enrollment*, we will take an investigatory approach: to see if we can discover methods that are working well or better than others across the four IOUs and their contractors and to assess whether there is any indication that some methods that are not being used should be added to the arsenal of marketing and outreach efforts. An added challenge is to determine why prospective customers who have been contacted by the utility through a number of outreach efforts (door hangers, direct mail, telephone calls) choose not to participate in the program. By exploring how each IOU and contractor tracks and manages its outreach, marketing, and enrollment processes, it may be possible to identify such a process, or to identify how such a process might be determined.



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Coupled with the desire to improve the enrollment process are questions about how to more effectively coordinate with the federal Low Income Heating Assistance Program (LIHEAP) and Weatherization Assistance Program (WAP), both administered by California Department of Community Services and Development, the Energy Efficiency and Conservation Block Grant (EECBG) program administered by the California Energy Commission (CEC); and other programs the IOUs operate in which low-income customers may participate without realizing that they also can participate in the LIEE program. Our proposal did not include discussions with non-utility organizations that could involve policy issues that are outside of the scope of the process evaluation. What is within the purview of the process evaluation is to document with the contractors and utility interviews instances where overlap has either created an opportunity or a problem and to identify where the overlaps with various programs might be occurring or possible to address.

Another key objective raised in the project initiation meetings by the CPUC is whether there are additional *opportunities to improve the efficiency of program delivery and implementation*. The CPUC would like to have process flow maps completed for each utility program. To do this effectively we will develop process flow maps with contractors, as the majority of program delivery occurs by third-party private and community-based organizations (CBO), not by the utilities.

Other questions raised in the project initiation meeting concerned challenges in implementing the three-measure minimum rule for gas homes, gaining landlord approval in order to install measures that are improvements to the dwelling, and the effect of the Combustion Ventilation Air assessment (CVA) on program eligibility. Therefore, the effect on assessment, the usefulness, and ability to adhere to the Statewide LIEE Policy and Procedures Manual (P&P Manual) also should be incorporated into discussions on delivery and implementation with the contractors and IOU representatives.

Based on this analysis, we have two key objectives for the process evaluation:

- ➔ Assess outreach approaches and recommend strategies for improving enrollment opportunities
- ➔ Document program processes and identify opportunities to improve the efficiency of program delivery and implementation

## PROCESS EVALUATION APPROACH

To address these objectives adequately and to provide the process flow analyses requested by the Energy Division, the evaluation must focus on the program delivery and implementation process. This will require in-depth interviews with management personnel at utilities and with key staff at a representative sample of contractor organizations. In addition, we will conduct field observations of multiple field crews for each utility, a focus group in each utility service territory (for a total of four) with staff from a contractor organization that has substantial reach within that service territory based on organization size, number of services offered, , and surveys with LIEE participants and nonparticipants.



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## PROCESS EVALUATION TOPICS

Based on our literature review and project initiation meetings, our research will begin with the following topics as ways to address these two objectives. While this evaluation will not be able to fully address each question to follow, these will be the core concepts that guide this study.

### Program Process Topics

- ➔ How is the program process organized at each utility? How is the program process organized at each contractor? How do primary contractors manage subcontractors?
- ➔ How is program staff organized at each utility? How is program staff organized at each primary contractor?
- ➔ How are the responsibilities and expectations defined in contractor agreements with utilities? How and what are contractors expected to report to the utilities?
- ➔ How are customer requests for services processed? How do outreach and marketing contractors identify customers who need services? Does the process differ based on the “lead source” or method by which the customer requested service?
- ➔ How are data collected? Are data shared across all utilities? Are data unique to LIEE or shared across multiple programs within the utility?
- ➔ How are the Statewide LIEE Policy and Procedures Manual and the Statewide Weatherization Installations Standards used by each utility and each contractor?

### Enrollment, Marketing, and Outreach Topics

- ➔ How does the program conduct outreach and marketing activities? How are contractors used by each utility? How are outreach and marketing activities coordinated to ensure the LIEE message reaches the eligible populations in each service territory? How is the CARE database used in outreach and marketing?
- ➔ How are outreach, marketing, and enrollment activities being planned at each utility? What changes, if any, have been needed to increase the number of homes being served annually?
- ➔ For any changes being planned to increase outreach, marketing, and enrollment activities, what steps are planned, and what steps have been taken to implement the outreach, marketing, and enrollment approach? What are contractor and program staff perceptions of the outreach, marketing, and enrollment approaches? What additional steps are planned or being considered?
- ➔ How are canvassing lists generated for marketing efforts? How are customers tracked as to whether they have been contacted in specific marketing campaigns? Are PRIZM segments adequate, and which segments tend to result in higher conversion?



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- What is the rate at which major marketing efforts are converted to installations? What are the conversion rates of leads to enrollments and of leads to installations? Are there outreach methods that work better for different segments of the population?

### Communication and Coordination Topics

- How are assessment staff/contractors notified of identified customers so that assessment and education services can be provided? How is the enhanced outreach, marketing, and enrollment approach being integrated into these processes?
- Once assessments are completed, how is the information provided to the customer about next steps? How are the results and resulting work orders developed? How are work orders transferred and communicated to the installation crews?
- How does the installation crew communicate the need for an inspection?

### Delivery and Implementation Topics

- How are assessments conducted? What type of education is provided to customers? How do customers respond to the audits? assessments?
- What training and credentials do assessment contractors have? What are their customer education goals? What is the expectation for customer response to education and assessment information? How do customers respond to the education and assessment information?
- Approximately how long do installations take? How are the size of crew teams and the scheduling of crews determined?
- How do assessment, installation, and inspection crews minimize their travel and field time? Do the crews find that the time constraints affect their interactions with customers? What suggestions do crews have to refine their efforts with customers?
- How long do inspections take? What are the key issues inspectors find when they conduct inspections? How are inspection-identified issues resolved? About how long does it take to resolve an inspection-identified issue?
- What is the average number of days between customer identification and assessment, and assessment and installation? If this cannot be determined from the program database, what is the goal for each of these steps? How do customers perceive the time between these events? Are there differences based on the lead source of the original contact?
- How many customer visits are required for the typical installation? What are the customer's perceptions of this number?



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### Customer Response Topics

- How do participating customers report learning about the program services? Do participants report any hesitancy to participate? What are their reasons for agreeing to participate despite hesitancy?
- What are customers' perceptions of the assessment and education services? What are customers' perceptions of the installation process and quality of products installed?
- Are participating customers following through on education recommendations? Are they aware of the education recommendations?
- Do nonparticipants report that they were offered the service and declined or that they have not been offered the service yet? Are nonparticipants interested in participating in the service?



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# 2 DOCUMENT REVIEW

To develop this research plan, we reviewed 73 documents provided by the CPUC and the four IOUs, marketing collateral material from each utility, 39 annual reports for the utilities from 2002 to 2009, and monthly reports for each utility from January 2009 to present<sup>1</sup>. The documents provide an overview of the program as it was designed and how it has evolved, and gives a baseline for understanding each utility's unique approach to specific process steps.

Appendix B presents a list of the documents we received. Appendix C contains a high-level organizational graphic.

## DESIGN

At its most basic, the LIEE program is structured to provide services and efficiency measures to help low-income households conserve energy and reduce their electricity costs. LIEE offers lighting retrofits, HVAC upgrades, refrigerators, pool pump replacements, duct testing and sealing, central air conditioner maintenance, evaporative cooler installation and maintenance, attic insulation, water heating measures, weatherization, minor home repairs, furnace repairs/replacements.

The CPUC is the "owner" of the program. The program design places each of the IOUs as administrators of the program in its service territory. The program is funded with ratepayer funds and the Utilities are responsible for the installation of measures, which are provided at no cost to eligible customers, and provide quality assurance to the CPUC. Based on the information we have received about the organizational structure of each utility's LIEE program design, we have identified some fundamental differences in approach. Interviews, observations, and focus group discussions will expand this high-level overview to a full process flow.

## PROGRAM PROCESSES

The P&P Manual provides statewide guidance to assist utilities in standardizing the delivery of program services. Process policies and procedures address the following areas:

- Outreach, Enrollment, and Assessment: Recruiting customers for participation in the LIEE program, verifying customer eligibility, and checking the customer's home to be sure it is feasible to install specific measure.
- Service Delivery: Installing appliances and other measures
- Inspections: Inspecting customer homes after service delivery to ensure appliance and measure installations are working properly and safely and code/requirements are met

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<sup>1</sup> See Appendix A for a list of the documents received.



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Responses to information requests submitted by each utility show that individual IOUs handle these steps differently<sup>2</sup>. We have broken these stages down into the following specific process steps:

- Contractor Selection
- Customer Identification
- Recruitment
- Enrollment Assessment
- Energy Education
- Installation
- Inspection
- Corrections , if required
- Follow-up

## ENROLLMENT, MARKETING, AND OUTREACH

Enrollment is the key to attaining the 2020 goal of reaching 100% of eligible and willing participants. All parties perceive this as very important. Participants in the project initiation meeting discussed several approaches for identifying customers who are eligible and have not yet been reached. Thus, a key issue for interviews with LIEE managers is to explore the challenges for enrollment: what each utility has done and what worked best.

Collateral materials delivered by each utility show that each has spent a significant amount of time and energy to get information about the LIEE program to the public. From quick attention-getters to comprehensive informational packets, the different materials appear to support the outreach goals of the program in multiple languages.

Our review of the utilities' marketing plans reveals that the utilities have used a variety of delivery methods for these materials. Customers' recollections of the method of initial contact are likely to be unreliable, unless gathered when they first enrolled in the program. Not all utilities collect this information,<sup>3</sup> but questions directed to outreach personnel should provide some evidence about which approaches consistently have been most effective.

A significant portion of each utility's monthly status report of the results of its LIEE and CARE program efforts (in compliance with ordering paragraph 17 of Decision 01-05-033, issued May 7, 2001) describes the enrollment and marketing efforts and provides a chronology of the efforts to achieve the 2020 goal. These reports both document innovative ideas, and help identify

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<sup>2</sup> See Appendix B for items requested in Data Request 1, submitted on August 27, 2010.

<sup>3</sup> See Appendix C for draft of Data Request 2 to be submitted by September 27, 2010.



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questions we will ask LIEE program managers and outreach support contractors about how they determine when a new initiative works, and which actions lead to enrollments and/or completed installations.

Our review of responses to the availability of data across all four utilities<sup>4</sup> showed that each utility gathers and retains different information. These differences do affect the ability to identify individuals, so we will ask utility management and contractors for more information about their data gathering processes.

## PROGRAM DELIVERY

The P&P Manual describes the operation of the LIEE program. Section 8, which summarizes general statewide assessment and inspection policies and procedures, is the only place in the manual where the expectations and written policies for home assessment specifically differ by utility. This differentiation opens the door to a deeper exploration of what kind of impact this has on the customer.

This topic is important, not only to the customer, but also to the process from the contractor's perspective. Thus, it is important that we query contractors on how assessments affect the timing of their projects. This will lead to additional questions about the timeliness of the entire process and an exploration of areas they see that might make it more efficient.

According to discussions during meetings with utility personnel, and a preliminary review of program structure, there are a variety of strategies for program delivery at the contractor level: some turnkey, and some specialty. We will explore the timeliness of each step of the process (outreach/enrollment/ assessment, service delivery, and inspection), and how contractors address each of them.

The proposed research plan included focus group discussions with utility staff members at two utilities with substantial internal staff providing LIEE program field functions. After reviewing each IOU's organizational structure, we realize that there are too few participants to conduct focus groups except at one utility with their inspection staff (see Table 2-1). This analysis further identified the key fielding effort as located in the contracting private companies and CBOs, and thus we will shift resources to this group.

**Table 2-1: Utility Implementation Staff**

UTILITY	ENROLLMENT AND ASSESSMENT	INSPECTION
PG&E	6	41
SCE	0	4
SDG&E	0	3
SCG	0	0

<sup>4</sup> See Appendix D for the initial Data Availability Request submitted on August 24, 2010.



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## CUSTOMER RESPONSE

Several documents address research to improve the understanding of the customers' perception of the LIEE program. This research suggests customer responses range from hesitation, to skepticism, to confusion. Focus group studies identified a number of potential barriers to participation; these barriers can be explored in a more systematic manner in the customer surveys. These include:

- **Concerns that it is too good to be true.** A few skeptics thought that the “free” offer that includes a home inspection might lead to identification of additional that they would have to pay for.
- **Believing they would not qualify.** Even though all the respondents in the focus groups are CARE customers, many do not think they are low income, so they presume that they would not qualify. A few were willing to take a chance by looking into the program anyway; but for many, this presumption about not being qualified likely keeps them from taking the next step or even from responding affirmatively to proactive outreach.
- **Skepticism about the quality of the appliances or work.** Some customers presumed that getting something free implies the item would be low quality – an off brand or too noisy.
- **Improvements will not help much, or are not worth the effort.** Some felt that their home does not really need these types of improvements, such as caulking and weather stripping, or that the improvements probably are not worth the effort of filling out an application, proving one's income, etc.
- **Reluctance to take from others who need it more.** Some customers expressed reluctance about the program out of concern that others probably need it more.
- **Embarrassment of admitting to being low income.** A few customers admitted that it is embarrassing to receive low-income assistance.

Using this basic understanding of the customer experience, the questions that we will develop for this evaluation will seek to validate the findings of the focus groups and look at possible ways of overcoming these perception barriers. Additional issues that emerge from this literature review have been added to the topics for the evaluation.

## CUSTOMER INFORMATION

Detailed information is forthcoming in response to a formal data request<sup>5</sup> that will cover measure- and project-specific information and customer demographics. Data received are necessary for the unique identification of participants and for providing a basis for comparison of households. This information will be used in the creation of a cycle time metric for evaluation and to explore potential barriers to participation.

<sup>5</sup> Appendix C for draft of Data Request 2 to be submitted by Sept. 27, 2010.



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# 3

## STATEMENT OF WORK

The following describes our approach to each task.

### TASK 1: PROJECT INITIATION MEETINGS

We held two project initiation meetings with PG&E, the Energy Division, and other involved parties. The first meeting was on August 12, 2010, with the evaluation leads for each IOU and an Energy Division representative. The second, held on August 25, 2010, involved the evaluation leads for each IOU and the Energy Division and program leads for each IOU. During these meetings, we reviewed the proposed scope of work; discussed adjustments to it; discussed how to obtain access to program materials, databases, and a list of contact names; and identified issues we needed in order to finalize the schedule of milestones and deliverables.

Prior to each meeting, we prepared an agenda and distributed it to appropriate parties. We also took notes for each meeting and distributed the draft notes to all parties. We have addressed comments and include the final meeting notes.

- Deliverables: Meeting Agenda (3 days prior to meeting); Draft and Final Minutes of Project Initiation Meeting

### TASK 2: DEVELOP DETAILED RESEARCH PLAN

This document is the research plan for the project based on: the discussion of the proposed statement of work, our review of program documents, project initiation meetings, and our initial discussion with program management staff. The research plan includes the sampling plan (Task 5), a description of the methodology for data collection and analysis (Task 5), a summary of findings from the review of program materials (Task 4), and the draft interview guide for management staff at the utilities (Task 6). Comments received during the comment period will be addressed in the final research plan.

- Deliverables: Draft Revised Research Plan (September 24, 2010); Final Research Plan

### TASK 3: CONDUCT PUBLIC WORKSHOP ON RESEARCH PLAN

We will conduct a public workshop on October 20, 2010 to present the research plan. We anticipate PG&E or the Energy Division will arrange for the meeting space and the webinar facilities, if needed, and will notify the appropriate service list. We will prepare an agenda for the workshop for distribution by PG&E or the Energy Division prior to the workshop. We will prepare and present a PowerPoint presentation describing the research plan approach. We will respond to questions and comments on the plan at the meeting and during the comment period. Subsequently, we will summarize the comments in a brief memo that describes both the outcomes



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of the meeting and the comments. We then will submit a brief memo to PG&E and other designated parties.

- Deliverables: Public Presentation; Brief Outlining Comments and Outcomes of the Meeting

#### **TASK 4: CONDUCT LIEE PROGRAM MATERIAL REVIEW**

Chapter 2 of this document presents our review of LIEE program materials received as of September 20, 2010. We requested the following items before the close of the project initiation meeting:

- ➔ Access to the LIEE participant and CARE enrollee data, including a data dictionary: *Data request 1 and a data request availability form already submitted; data request 2 is under development and will be submitted September 27, 2010.*
- ➔ Contact lists for utility staff involved in LIEE program management, implementation, outreach, and marketing: *Lists of staff or arrangements for contact person were received from all utilities.*
- ➔ Contact lists with phone numbers and email addresses for every LIEE organization contracting with each utility: *Lists were received from, or drawn from monthly reports for all utilities*
- ➔ Program Collateral – including program implementation plans; program marketing plans; program theory and logic models; program quarterly reports for 2009 and 2010 (if not on the Low Income Oversight Board website); contracting organization monthly reports for 2009 and 2010; and other documents deemed important by PG&E, the Energy Division, or other parties: *Monthly and annual reports for each utility were received from the Energy Division. Program collateral was received from all utilities.*

The documents and contacts lists other than for LIEE and CARE participants have been received and were reviewed for this research plan.

- Deliverables: Draft Material Review, Chapter 2 Final Material Review, Chapter 2

#### **TASK 5: DEVELOP SAMPLING DESIGNS AND METHODOLOGY**

Table 3-1 presents our sampling plan to address the research questions.

**Table 3-1: Preliminary Sampling Plan**

TARGET GROUP	POPULATION	SAMPLE	DATA COLLECTION APPROACH	CONFIDENCE & PRECISION	
				STATEWIDE	BY UTILITY
Program Management Staff	12	8	In-Depth Interview	NA	NA



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<b>Key Staff at Contractor Firms and PG&amp;E Utility inspectors</b>	+150	5 groups	Focus Group	NA	NA
<b>Community-Based Organizations</b>	44	27	Phone Interview	95/5*	NA
<b>Private Contractors</b>	97	40	Phone Interview	95/5*	NA
<b>Participant Customers (Jan 2009-June 2010)</b>	387,570	269	Phone Survey	90/5**	90/10**
<b>Nonparticipant Customers</b>	4,653,499	269	Phone Survey	90/5**	90/10**
<b>Field Crew Observations</b>	NA	10+	Site Visit	NA	NA

\* Assumes absolute precision, proportional sampling, 2-tailed test, finite population correction.

\*\* Assumes absolute precision, proportional sampling, 2-tailed test.

The following reviews our assumptions in developing this sampling strategy. If these assumptions are revised during the project initiation meeting, we will need to adjust the sampling plan to reduce or expand the sample and the approaches outlined here.

- ➔ **Program Management Staff:** We identified 12 key staff members involved in program management across the four utilities. We will interview eight of these key staff (a census). These interviews will focus on the implementation and delivery of the LIEE.
- ➔ **Contracted Organizations:** There are 44 community-based organizations (CBO) and 97 private contractors providing services to the LIEE program. Table 3-2 displays the number of each type of organization providing various services. These services range from customer enrollment and assessment, and energy education to appliance installation, HVAC maintenance, and weatherization.

Five of the private organizations and three of the CBOs offer services to three or four utilities; several of these are among the 13 firms that offer more than one type of program service. Our sampling plan will seek a census of these 13 firms and a sample of the remaining 127, for a total of 27 interviews with CBOs and 40 interviews with private companies offering services in LIEE. The goal will be to include firms engaged in each of the services proportionate to the total number of contractors engaged in them.

**Table 3-2: Distribution of Contracted Organization Services**

	APPLIANCES	E&A	HVAC SERVICES	INSTALLATION	INSPECTION	ALSO LIHEAP	WX INSTALLATION	TOTAL SERVICE
<b>CBO</b>	0	3	3	7	1	5	25	44



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Private	11	10	38	13	3	1	21	97
Total	11	13	41	19	4	6	46	140

- ➔ **Staff at Contractor Firms:** Thirteen organizations work with more than one utility to provide multiple service areas of program implementation: outreach and marketing, enrollment/assessment, installation, and inspections. We plan to conduct four focus groups targeting contracting organization within each utility service territory. We will identify contractors with the number of staff adequate to provide synergism, usually 8-10 individuals. Our expectation is that these will be mixed groups including individuals involved in enrollment, installation, and inspection activities; the homogeneity of the focus group will be based on participants' common employer rather than tasks they conduct in the field. We anticipate that we will be able to obtain contact information for key staff at each of these organizations; we will notify the key staff by postal letter or email and invite them to participate in the focus group. We will provide confidentiality and anonymity to respondents.
- ➔ **Utility Inspectors:** There are 41 individual staff members at PG&E who conduct inspections for the LIEE program. Ideally, this one focus group of 9-11 individuals will be conducted at a central location coordinated by PG&E to limit the need for travel by the individual inspectors. The homogeneity of the focus group will be based on participants' common employer as well as tasks they conduct in the field. We anticipate that we will be able to coordinate with our contact person at PG&E to help recruit and coordinate scheduling and logistics for this focus group; we will notify the key staff by postal letter or email and invite them to participate in the focus group. We will provide confidentiality and anonymity to respondents.
- ➔ **Participant Customers (January 2009-June 2010):** We estimate the LIEE participants for 2009 at 250,000 and the participants continuously enrolled for the period January through May 2010 at 135,000, for a total of about 385,000 participants as of May 30, 2010. A sample of 269 (67 per utility, plus 1 extra) will provide 90/5 confidence and precision at the state level and 90/10 at the utility level. We will select a random sample of program participants with a known mailing address and phone number. We have found that a sample frame eight times the anticipated completes typically is necessary to ensure that will not need to make an additional draw from the population. We will send advance letters to the selected respondents in waves to ensure that we make six attempts to complete a call, prior to drawing another sample. A Spanish version of the participant survey will be used for Spanish-speaking households.
- ➔ **Nonparticipant Customers:** Nonparticipants will be drawn from the CARE list for each utility (totaling over 4,650,000 households) after selecting for and removing those who have participated in LIEE. We have asked each utility to provide a list of CARE participants who were on the list from January 2009 through May 2010. A sample of 269 (67 per utility, plus 1 extra) will provide 90/5 confidence and precision at the state level



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and 90/10 at the utility level. We will send advance letters to the selected respondents in waves to ensure that we make six attempts to complete a call, prior to drawing another sample. A Spanish version of the participant survey will be used for Spanish-speaking households.

- ➔ **Field Crew Observations:** One hundred six contractors deliver installations, six deliver inspections, and 13 deliver E&A services, plus 48 utility staff deliver inspections, and 6 utility staff members deliver E&A services. We estimate that there are 200 field crews delivering LIEE services. We plan to observe a representative sample of field crews during one week within each utility service territory. We would like to focus on the education and assessment and inspection services: effectively two days with E&A crews, two days with inspection crews, and one day with installation crews. This will result in over 160 hours of observation. We targeted assessment and inspection crews because assessments include education components, and inspections are the primary quality-control activity. In conducting observations, we will prepare an observation guide to ensure consistency in the observation reports submitted by different observers. The observers will coordinate their efforts to ensure that their observations are being conducted in a similar manner.

Our plan is to observe with a different crew each morning and each afternoon of each day of the week. We will conduct call-back interviews with crew members or talk to them outside of the house if we have any questions about their activities. We will only observe and not intervene during the field observations.

- Deliverables: Draft Sample Design Chapter, Final Sample Design Chapter

## TASK 6: SPECIFY DATA COLLECTION PROCEDURE / COLLECT DATA

In this section, we describe our methods for in-depth interviewing, focus groups, ride-along observations, phone interviews, and surveys. In all cases, we will prepare draft instruments for review and comment by the LIEE process evaluation oversight parties, and will address comments in the final versions of the instruments.

- ➔ **In-Depth Interviewing:** Research Into Action staff will conduct in-depth interviews; most will be conducted by telephone, although some may be conducted in-person. We have contact information for program staff and have met many of them through the project initiation process. We will notify them by phone and email to schedule the interviews. The in-depth interviews will be audio-recorded with the permission of the respondent. We will use a Word document interview guide and record responses during the interviews; we will provide a copy to the interviewees for their review to ensure we have correctly captured the discussion. The audio recording will provide back-up for any responses that are unclear, and a transcription may be made to ensure all responses are documented. The final interview guide is included in this research plan.<sup>6</sup>

<sup>6</sup> See Appendix E for the interview guide for utility management staff.



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- **Focus Groups:** We will prepare a moderators script informed by the discussions with the utilities' management staff. Since our targets for these focus groups will be the more active contractors and those who have a greater reach, we will attempt to conduct the focus groups at the company meeting locations in order to facilitate attendance. We will work with the utilities' evaluation staff to invite these companies' staff to the focus groups. For the inspector focus group with PG&E inspectors, we will work with the evaluation coordinator to invite these participants, as well as to arrange a meeting location that is convenient to those attending. We will audio-record these focus groups and transcribe the discussions for analysis. A draft moderator guide will be submitted October 29, 2010, with response comments expected within one week of submission.
- **Phone Interviews:** Research Into Action uses *Vovici* software for implementing phone surveys involving samples of between 30 and 150 individuals. *Vovici* is an Internet-based database that permits us to do computer-assisted telephone interviewing. APPRISE and Research Into Action staff will be able to conduct these interviews from their separate locations, and data will be entered into a common database that can be downloaded for analysis. We will invite contacts to participate in the interview by email or postal letter (depending on available contact information) and provide a contact person to whom they can respond. If necessary, we can translate the phone interviews into Spanish, as both APPRISE and Research into Action have Spanish-speaking staff who can interview in Spanish, though this version will not be implemented in *Vovici*. The draft contractor interview guide will be submitted by October 29, 2010, with response comments expected within one week of submission.
- **Ride-Along Observations:** We will coordinate with utility program managers to schedule observation with utility staff and with contractors to schedule ride-along observations with contractor crews. Each observer will use a standard guide for recording the observations, including a set of questions to ask crew members. We will provide a draft observation guide by October 29, 2010, with response comments expected within one week of submission.
- **Phone Surveys:** Research Into Action will provide Abt SRBI the contact lists and final approved survey instruments. Abt SRBI has conducted thousands of interviews with low-income customers as part of specific surveys related to low-income populations and surveys of a cross-section of the U.S. population. A key concern with low-income respondents is that the incidence of cell phones is much greater in this group than in other populations – typically over 30-40% compared to around 20% in the non-low-income population. Additionally, it often takes more attempts to reach this population, and the purpose of the survey has to be explained clearly and briefly to alleviate potential suspicion about the call. As a consequence, we will implement cell-phone protocols, which we have developed and used effectively in several other evaluations. Some of the key considerations in the cell phone protocol include; Respecting time and availability giving the respondent an opportunity to reschedule the call at their convenience, Providing a toll-free number that they can call back so as to not burden the respondent with additional cost. The draft customer phone survey instrument will be submitted by



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November 12, 2010, with response comments expected within one week of submission.

- Deliverables: Complete Data Assessment and Data Collection Strategy Memorandum; Draft and Final Survey Instruments; Weekly Data Collection Status Reports

### **TASK 7: DATA ANALYSES**

We structure our qualitative and quantitative data collection to permit comparing and contrasting responses across target populations. The issues identified in the introductory chapter will frame our questions across each of the target groups.

We analyze qualitative data with the assistance of *NVivo*, a qualitative analysis software tool. All transcribed/documented verbatim responses to interview questions, focus group discussions, and open-ended survey questions are contained in *Word, PDF*, audio, or video files, which we upload to *NVivo*. We develop categories from our analysis plan and our review of the responses, and code verbatim responses to the categories. We then can be clear on the relative frequency of specific categories of responses, from which parties or types of parties these responses emerge, and the degree to which the categories are of high or low concern to respondents.

Quantitative data will be analyzed with the assistance of *SPSS*. In the case of standard survey data, we anticipate that this project primarily will rely on reporting counts, frequencies, and measures of central tendency and association.

We will also overlay geographic data on LIEE and CARE customer enrollment onto GIS maps of the four utility service territories. We will also document geographic distribution of LIEE and CARE participants in each service territory and include that information in the final report.

We will provide PG&E and other designated parties reports on the progress of the analysis as part of our regular reporting activities.

- Deliverables: Regular Status Reports; Preliminary Results Presentation and Memo

### **TASK 8: PREPARE AND DELIVER DRAFT REPORT**

We will prepare a draft report for review and comment. The draft report will include an executive summary, provide detailed discussion of the methodology, and present the findings for the research questions. We will also include preliminary conclusions and recommendations based on these findings. We will submit the draft report and prepare a presentation on the report for the public workshop described in Task 9.

- Deliverable: Draft Report

### **TASK 9: CONDUCT PUBLIC WORKSHOP TO REPORT PROCESS EVALUATION FINDINGS**

We will conduct a public workshop to present the process evaluation results and to obtain comments about them. We anticipate



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that PG&E or the Energy Division will arrange for the meeting space and the webinar facilities, if they are to be used, and will notify the appropriate service list. We will prepare an agenda for the workshop for distribution by PG&E and/or the Energy Division prior to the workshop. We will prepare and present a PowerPoint presentation describing the process evaluation results. We will respond to questions and comments on the results at the meeting and during the comment period. We will summarize the comments in a brief memo that describes both the outcomes of the meeting and the comments. We will submit the brief memo to PG&E and other designated parties.

- Deliverables: Public Presentation; Brief Outlining Comments and Outcomes of Meeting

### **TASK 10: PREPARE AND DELIVER FINAL REPORT AND DATA SETS**

We will address comments on the draft report and submit a final report to PG&E and all the designated parties in both hard copy and electronic versions of *Word* and *PDF*. We will prepare final datasets for delivery in *SAS*, and provide complete documentation of coding, syntax, and a data dictionary in *Excel*. Our experience is that the *Excel* format is the most transparent format for data delivery. Subsequent users can use the *SAS* file or the *Excel* file to work with the data in other formats, such as *SPSS*, *Stata*, etc.

- Deliverables: Final Process Evaluation Report in *Word* and *PDF*; Final Data Sets in *SAS* (and *Excel*) with Complete Documentation

### **TASK 11: PROJECT MANAGEMENT AND REPORTING**

We will prepare monthly status reports to coincide with our monthly invoices and will submit these status reports to PG&E, the Energy Division, and any other designated parties; we will participate in scheduled conference calls and, to the best of our ability, in any unscheduled calls, to deal with specific issues or concerns. We will provide interim memoranda as described above, including those tracking data collection progress and documenting any unusual findings that warrant early remediation, and will maintain regular (weekly and, at times, daily) contact with the evaluation lead for PG&E and any other designated parties.

- Deliverables: Regular Monthly Reporting; Conference Calls; Interim Memoranda; Invoices



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# 4

## SCHEDULE OF MILESTONES

Table 4-1: Schedule of Milestones and Deliverables

TASK	MILESTONES AND DELIVERABLES	ANTICIPATED COMPLETION DATE
Task 1	Agenda for Project Initiation Meeting	3 days ahead of meeting
Task 1	Project Initiation	August 25, 2010
Task 1	Draft Project Initiation Meeting Notes	1 week after meeting
Task 1	Final Project Initiation Meeting Notes	Within 1 week of comments
Task 2	Develop Research Plan	August-September 2010
Task 2	Draft Research Plan	September 24, 2010
Task 2	Final Research Plan	Within 1 week of comments
Task 3	Conduct Public Workshop on Research Plan	October 20, 2010
Task 4	Conduct LIEE Program Material Review	September 2010
Task 4	Draft Material Review Memo	September 24, 2010
Task 5	Develop Sampling Design	September 2010
Task 5	Draft Sample Design	September 24, 2010
Task 6	Specify Data Collection Procedures	September 2010
Task 6	Draft Data Collection Procedures	September 24, 2010
Task 6	<b>Draft Data Collection Instruments</b> <ul style="list-style-type: none"> <li>• Staff interviews</li> <li>• Contractor interviews/field observations/focus groups</li> <li>• Customer surveys</li> </ul>	September 27, 2010 October 29, 2010 November 12, 2010
Task 6	Final Data Collection Instruments	Within 1 week of comments
Task 6	Collect Data	October-December
Task 6	Staff Interviews	October 2010
Task 6	Contractor Interviews	November 2010



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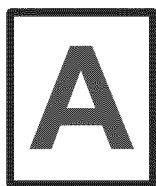
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<b>Task 6</b>	<b>Utility Staff Focus Groups</b>	October 2010
<b>Task 6</b>	<b>Customer Surveys</b>	November-December 2010
<b>Task 7</b>	<b>Data Analysis</b>	December-January 2010
<b>Task 7</b>	<b>Preliminary Results Review</b>	January 15, 2011
<b>Task 8</b>	<b>Draft Process Evaluation Report</b>	February 2011
<b>Task 9</b>	<b>Conduct Public Workshop to Report Results</b>	March 2011
<b>Task 10</b>	<b>Deliver Final Process Evaluation Report</b>	<b>April 2011</b>
<b>Task 10</b>	<b>Provide Databases with Documentation</b>	April 2011



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# APPENDIX A: LIST OF DOCUMENTS

## LIST OF DOCUMENTS

### PG&E

PG&E\_2009\_Annual\_Report\_LIEE&CARE\_05-03-2010

PG&E\_Annual\_LIEE\_Program\_Budget&Expenses

PG&E\_Data\_Request\_Form\_08-30-2010

PG&E\_IDS\_M\_Products\_Org\_Charts\_08-31-2010

PG&E\_IDS\_M\_Team\_Org\_Charts\_08-31-2010

PG&E\_LIEE\_MidYear\_2010\_Review

PG&E\_LIEE-EE\_Report\_08-02-2010

PG&E\_Response\_To\_Ruling\_Application\_07-01-2008

SG&E\_WNA\_Workshop\_07-21-2009

### SCE

SCE\_2008\_LIEE\_Annual\_Report\_05-2009

SCE\_Data\_Request\_Form

SCE\_EMA\_HAS\_Form\_Rev04\_04-10-2008

SCE\_EMA\_Program\_Contractors\_Manual\_V5-0\_2006-2008

SCE\_EMA\_Program\_Inspector\_Pocket\_Reference\_Guide\_V1.0

SCE\_Email\_Audit\_Notification\_09-08-2010

SCE\_Email\_LIEE\_Process\_Stuff\_08-11-10

SCE\_Email\_LIEE\_Process\_Stuff\_08-13-2010

SCE\_EMAP\_Application\_Rev8\_04-10-2008

SCE\_First\_Quarter\_2010\_Report\_05-03-2010

SCE\_Internal\_Support\_Descriptions

SCE\_LIEE&CARE\_2009\_Annual\_Report\_Budget\_05-03-2010

SCE\_LIEE&CARE\_Annual\_Report\_05-03-2010

SCE\_LIEE\_Monthly\_Report\_For\_June\_2010\_07-21-2010



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SCE\_LIEE\_Organization\_Model  
 SCE\_LIEE\_RIA\_Process\_Eval\_Kickoff\_Questions  
 SCE\_LIEE-PWHRP\_Best\_Practices\_Approach\_01-22-2010  
 SCE\_Opening\_Comments\_In\_Response\_To\_Ruling\_07-02-2009  
 SCE\_PSPC\_EMA\_2009\_Year\_End\_Report\_01-2010  
 SCE\_Response\_To\_Ruling\_07-01-2008  
 SCE\_Staff\_Contact\_List  
 SCE\_WNA\_July\_2009\_Workshop

### SCG

PG&E\_SCE\_SCG\_SDG&E\_LIEE\_Program\_Research\_Results\_06-19-2010  
 SCG\_2009\_Annual\_Report\_Activity\_05-03-2010  
 SCG\_2010\_LIEE\_Marketing&Outreach\_DAP  
 SCG\_DAP\_Contractors  
 SCG\_Data\_Request\_Response\_09-08-2010  
 SCG\_LIEE\_Customer\_Feedback\_Survey\_11-09-2010  
 SCG\_LIEE\_DR1\_Q4\_Org\_Chart  
 SCG\_LIEE\_DR1\_Q8\_Org\_Chart  
 SCG\_Process\_Eval\_Data\_Request  
 SCG\_Process\_Eval\_Data\_Request\_1\_09-08-2010  
 SCG\_Response\_To\_Ruling\_07-01-2008  
 SCG\_WNA\_Workshop\_07-21-2009

### SDG&E

SDG&E\_Response\_To\_Ruling\_07-01-2008  
 SDG&E\_2009\_Annual\_Report\_Activity\_05-03-2010  
 SDG&E\_Contractors\_List  
 SDG&E\_Customer\_Assistance\_Marketing\_Plan  
 SDG&E\_Install\_Process  
 SDG&E\_LIEE\_Data\_Request\_1\_Research\_09-09-2010  
 SDG&E\_LIEE\_Program\_Overview\_08-25-2010  
 SDG&E\_Org\_Chart



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SDG&E\_Proc\_Eval\_Data\_Request\_1  
SDG&E\_Process\_Diagram  
SDG&E\_Staff\_Time\_Allocation  
SDG&E\_WNA\_Workshop\_07-21-2009

**MISCELLANEOUS**

2001\_LIEE\_Proce\_Evaluation  
2010 Policy and Procedures Manual Working Draft  
ACF474 3 measures role modification  
CA%20Conventional%20Home%20Weatherization%20Installation%20Standards%20Part%201  
%209-20-05  
Decision on LIEE 2009-2011  
Doc Log  
HPi Research Plan Overview for Public Meeting-111809  
LIEE 2005 Impact  
LIEE 2007 Needs Assessment  
LIEE Impact Data Request  
LIEE Impact Eval Final Research Plan 113009 (2)  
LIEE Impact On-siteDataRequest  
LIEE Segmentation & High Usage Workplan  
LIEE Segmentation Focus Group Report  
Segmentation data request  
StatewideP&PManual-2006-final\_rev04\_2006  
white paper draftACFB54



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# APPENDIX B: DATA REQUEST 1

In addition to the contributions during the kickoff meeting, answers to the following questions will help us better understand each utility's unique approach. While many of these questions were addressed in the meeting, revisiting them after you have had time to process all of the information shared is often very helpful. This list also includes specific data request that were identified during the meeting.

## ADDITIONAL INFORMATION REQUESTS

### Request for Utilities

Do you have a Strategic Marketing Plan which lays out goals and methods of reaching new customers?

If you have not already done so please provide the name and contract information for any contractors or utility marketing departments responsible for marketing efforts.

If you have not already done so, please provide electronic or hard copies of marketing and outreach collateral provided to customers and community groups.

If you have one please provide an Organizational Chart for the LIEE staff.

If you have not already done so, please provide the name, job responsibility, and contact information for LIEE utility staff and please indicate their approximate % of work time on LIEE.

If you have one please provide a graphic showing the decision making structure for LIEE in your utility.

If you have not already done so, please provide the name, responsibility (assessment, installation general, installation specific measure, inspections), and contact information for contractors working on LIEE.

Please indicate which are CBOs and which are private companies.

Please indicate which are managed at the utility level or are subcontractors under a primary contractor.

Please provide any existing process maps that describe the program delivery process.

Please provide any logic models or program theory descriptions for the LIEE at your utility.

Please provide any focus group reports or transcripts for studies done for LIEE.



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### **Request for Utility and CPUC**

If you have anything additional to add to the discussion on Wednesday please address the following:

What are key challenges that the program is facing today?

What unique challenges does your Utility (or the CPUC) face regarding the program?

What key successes has the program seen that you would like to see highlighted or documented?

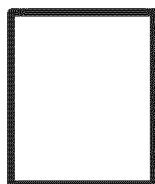
What is your major hope for the outcome from the LIEE process evaluation?



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# APPENDIX C: DATA REQUEST 2

For Participants in LIEE January 1, 2009 to May 31, 2010.

\*Shaded fields indicate requested item not in Impact study data request.

RIA - LIEE Utility Data Request			
	<i>Data Name</i>	<i>Data Description</i>	<i>Purpose</i>
<b>Program-level information</b>			
	Account number	unique identifier for the account	necessary to uniquely identify each customer participant
	Premise number	unique identified for the premise	necessary to uniquely identify each customer participant
	HouseID	unique household identifier	necessary to uniquely identify each customer participant
	Address	street address of the premise served	necessary to uniquely identify each customer participant
	City		necessary to uniquely identify each customer participant
	Zip		necessary to uniquely identify each customer participant
	First Name of the participant		necessary to uniquely identify each customer participant
	Last Name		necessary to uniquely identify each customer participant
	Home phone		necessary to uniquely identify each customer participant
	Work phone		necessary to uniquely identify each customer participant
	Dcare	if the participant is on a CARE rate (binary, 0/1)	potential indication of barrier to participation
	MM	binary flag, 1 if the rate is master-metered, 0 otherwise	potential indication of barrier to participation
	Total Annual Consumption	Previous 12 months	to provide basis for comparison of households
<b>Measure-level information</b>			
	Description of measure	name or other unique identifier of the measure installed. These may or may not be grouped during analysis (Repeat for multiple measures)	Will be used in the creation of an cycle time metric for evaluation



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	Quantity installed	(Repeat for multiple measures)	Will be used in the creation of an cycle time metric for evaluation
	Date of initial customer application		Will be used in the creation of an cycle time metric for evaluation
	Date of the initial energy assessment		Will be used in the creation of an cycle time metric for evaluation
	Date installation started		Will be used in the creation of an cycle time metric for evaluation
	Date install complete		Will be used in the creation of an cycle time metric for evaluation
	Date of inspection	(or N/A if not done)	Will be used in the creation of an cycle time metric for evaluation
	Date of Customer Satisfaction Survey	(or N/A if not done)	Will be used in the creation of an efficiency metric for evaluation
	Name (or some form of ID) of the agency or contractor performing the initial assessment		To protect from having sampling of different agencies in sample
	Name (or some form of ID) of the agency or contractor performing the installation		To protect from having sampling of different agencies in sample
	Name (or some form of ID) of the agency or contractor performing the inspection	(or N/A if not done)	To protect from having sampling of different agencies in sample
	Was corrective action required as a result of this inspection?	Yes/No	To protect from having sampling of different agencies in sample
	Name (or some form of ID) of appliance vendor		To protect from having sampling of different agencies in sample
	Is this residence a go-back?	Did this residence participate in the program prior to 2002	potential indication of barrier to participation
	Whether funds from other sources were leveraged to provide conservation measures to the home (Yes/No)	Yes/No	Assess different types of activities with LIEE participants



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<b>Demographics</b>			
	Occupants	The number of occupants residing at the home	eliminate need to ask the question
	House type	Is the home single-family, multi-family, mobile home?	eliminate need to ask the question
	Income	Annual household income in dollars	eliminate need to ask the question
	Senior	Number of residents in the home who are 60 or older	eliminate need to ask the question
	Disabled	While this is a difficult variable to validate due to statutory constraints, provide what information you have on disability status	eliminate need to ask the question
	Year home Built		eliminate need to ask the question
	Home Ownership	Is the home owned by resident or is it a rental	eliminate need to ask the question
	Square Feet	What is the square footage of the residence	eliminate need to ask the question
	Appliance Owner	Are the appliances owned by the occupant or a landlord?	eliminate need to ask the question
	Preferred language	What is the preferred language of the occupant?	eliminate need to ask the question
<b>Additional Fields</b>			
	Method by which applicant heard about LIEE		possible segmentation variable



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# APPENDIX D: DATA AVAILABILITY

Data Item	Available? (check for yes)	Comment
<b>General information</b>		
Marketing efforts by zip code		
Process flow charts for each program		
<b>Data about each Job</b>		
Measures Recommended		
Measures Installed		
Number of Measures		
Cost of installed measure(s)		
Estimated resources leveraged		
What program was that resource coordinated with?		
Estimated energy savings		
Go-back (served before 2002) (y/n)		
Date of:		
Application		
Assessment		
Type of Diagnostic test done during		
Assessment		
Installation start		
Installation complete		
Follow-up inspection (y/n) (date)		
Was any correction required (y/n)		
Partial complete (y/n)		
Customer satisfaction survey (y/n) (date)		
Contractor (w/ Contact info)		
Contractor type (community action agency, not-for-profit, for profit, etc.)		
Sub-Contractor (w/Contact info)		
Assessment contractor (w/Contact info)		
Appliance vendor (w/Contact info)		
ID numbers (to permit match to CARES data)		
-- not sure what will work: Job (AIN?); premise (SAID?); Account #;		



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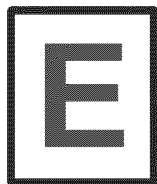
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# APPENDIX E: INTERVIEW GUIDE

## LOW INCOME ENERGY EFFICIENCY (LIEE) PROGRAM MANAGEMENT INTERVIEWS

### INTERVIEW OBJECTIVES

The purpose of these interviews is to get an update on program progress, fill out our understanding of program management, administration, and implementation, and to learn about the successes and challenges during the last 18 months of implementation. The objectives are: a) to identify what about the program is working well and what could possibly be improved; b) gain a better understanding of the existing administrative and management level processes in place internally; and c) to help guide in the development of data collection instruments for conducting the remainder of the process evaluation research with implementation contractors, program participants, and non-participants.

### TARGET INTERVIEW RESPONDENTS

Depending upon availability, two management level interviews will be conducted with each utility.

### GENERAL PLAN FOR OCTOBER 2010

Interviews on the telephone with various LIEE program staff to be conducted in mid October 2010.

Date \_\_\_\_\_ Time \_\_\_\_\_

Phone Number

\_\_\_\_\_

Utility

\_\_\_\_\_

Name

\_\_\_\_\_

Contact Title

\_\_\_\_\_



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Introduction

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We are conducting the process evaluation for the LIEE program.

The purpose of the evaluation is to document various processes of the program and see if there are any opportunities to modify or enhance the program to be more effective in the field. Since the LIEE program has been operating for several years now, and is well on its way to the 2020 goal of reaching 100% of eligible customers, this is a good time to ask some general questions regarding the programs. This will also help us as we develop surveys for participants and implementation contractors.

### Contact Information

1. I already know that your name is \_\_\_\_\_ and I believe that your title is \_\_\_\_\_. Is that correct?
2. How long have you been involved in the LIEE program?
  - a. In what different capacities?
3. Describe for me what your specific role is in relation to the program.

### Overview – Program Progress

4. First, In general, how has the response to the program in 2009 & 2010 been compared with what you expected?
  - a. Have you noticed any changes in consumer response to the program compared to previous years?
5. What have you been hearing about the programs ability to keep meeting goals...?
  - a. ...from Energy Division?
  - b. ...from your internal LIEE staff?
  - c. ...from contractors?
  - d. ...from customers?
6. So if things continue as they have been going, do you think the program will meet its 2020 goals?
7. Can you foresee any circumstances that might slow things down? If so, what?
  - a. If something like that happened, how do you think you might respond?



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- b. How do you think that would go – any potential problems in responding?
8. The LIEE program has undergone a number of process changes since it started. What are some of those changes that you feel have had the greatest impact on the way that you administer the program?
- 
- 
9. Are there any major or important changes being considered at the utility or the CPUC level that you believe will affect the program's success?
- What kind of changes do you think that will result in?
  - What do you think led to that change coming about?
  - If they state only positive or only negative, probe for the opposite

### Structure

I am trying to get an understanding, or create a picture of how the people involved in LIEE are organized; I've already gotten org charts that give specific details but I am also interested in tasks, roles, groups, etc.

10. How many total staff does the utility have dedicated to the LIEE program?
- In your view, is this an adequate number for the scale of the program?
  - Are any of these people cross-program individuals, also working on LIHEAP or WAP?
  - If not are there any specific areas where there is too many or too few staff involved?
11. Have there recently been any attempts to streamline things internally to reduce process time?
- What changes were made? Did this involve changes in people or processes?
  - Have those changes been effective?
  - If no streamlining, probe: Can you think of any other ways people/processes could be organized better?



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12. Some utilities have chosen to reduce internal workload by hiring a primary contractor to handle most of the individual contracts, leaving the utility staff managing only a few special circumstance contracts. What are some of the unique challenges or benefits that you see to this approach?

### Coordination/Communication

I would like to ask about how the various facets of program administration and implementation are going; let's start with your coordination and communication with the implementation staff.

13. First, can you just generally describe the lines of coordination and communication for the LIEE within your organization? [Probe for who talks to whom, how often, what about, and how?]
  - a. How is communication going in general?
  - b. Have you made and adjustments to improve communication? [What are they and how did they improve things.]
14. Do you feel like you are being consulted as necessary and kept informed of activities?
 

[If interviewee reports any challenges, clarify nature, then ask:]

  - a. What effects, if any, is this having on program progress?
  - b. What is being done about that? Do you think that will fix things?
  - c. Is there anything else you might do to make communication and coordination as good as possible?
15. How about coordination and communication between the contractors and the LIEE staff at the utility. Can you describe how the process works?
  - a. For instance, how do you allocate jobs to contractors?
  - b. How do contractors report to you on any problems in the field?
  - c. How do contractors report on their accomplishments?
  - d. How do you provide oversight to ensure the contractors are providing a quality service?
  - e. Do you coordinate with other utility or state run programs to streamline the contractor's work with low income customers?

### Marketing and Outreach

Now, how about marketing and outreach?



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16. What were your plans for marketing and outreach in 2009 and 2010?

- a. Have things been going as planned? [probe for details of what has or has not gone as planned and what the perceived source of this is]
- b. [If interviewee reports any challenges, clarify nature of the challenges – not adhering to deadlines, quality not as expected – and what aspect of marketing it involves – collateral, recruitment, etc., then ask:]
- c. What effect (if any) is this having on implementation?
- d. What is being done about that?
- e. Do you think that will fix things?

17. And how is your communication with the people running the marketing activities?

- a. Do you feel like you are being consulted as necessary and kept informed of activities? [If interviewee reports any communication challenges clarify what those challenges are and how they are ]
- b. What is being done about that? Do you think that will fix things?

18. How challenging is it to identify customers who are eligible and who have not yet been reached?

- a. How do you target or identify customers for your contractors to reach out to?
- b. Have you run into any major obstacles in this?
- c. What have you done to try to overcome those?
- d. How has that worked for you?
- e. Do you coordinate with LIHEAP or WAP program managers?

19. I have read in the monthly reports over the last year or so of a number of different efforts, some of them innovative and unique that you have made to get the word out about the program. What specifically have you felt worked the best?

- a. How do you know?

20. Do you track the rate at which major marketing efforts are converted into applications? Do you continue to track those through completion to assess value of the marketing approach?

- a. If not, has this level of tracking been considered?
- b. If so, why did you/others decide not to pursue it?



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(Probe: time, \$, usefulness/ability to do something with data)

### Installers

Since third parties do the vast majority of the work directly with the consumers, I would like to ask you a few questions about your relationship with the contracting companies.

21. How do you recruit /vet new contractors?
22. Would you say it is easy or difficult to recruit and retain installers for the LIEE program?
  - a. Why do you think that is?
23. Do you notice any significant differences in working with CBO's versus private companies?
  - a. Have there been any more or fewer concerns raised about program requirements from one group or the other? [If difference noted, clarify:]
  - b. What effects, if any, is this having on program progress?
  - c. Some are also LIHEAP/WAP contractors, how does that affect your relationship with them, or their work?
24. Some of your contractors handle the program from outreach through inspections. What have you found to be the advantages/disadvantages of this model versus having contractors who are specialized in one service point?
25. How are the responsibilities and expectations defined in contractor agreements with utilities?
26. How do they know how and what they are expected to report to the utilities?
27. Consumer energy education is one of the stated objectives of the LIEE program, how is this handled for your utility?
  - a. How are you able to verify that the education is being delivered?
28. Do your contractors coordinate with LIHEAP or WAP on visits/outreach to customers?

### Administration

29. How about administrative issues – processing applications, collecting data, and so forth – have there been any challenges or concerns there?

Probes:



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- a. Has anyone indicated any difficulty in completing applications?
30. Let's talk about the data tracking systems, including your main program databases and how it is being populated by program implementation staff. First, can you describe to me how customer data is entered into the main program database and by whom?
31. How do you tell whether the people who are supposed to be recording project data are doing it? And are they?
32. Has anyone mentioned any difficulties in recording project data in the database?

[If interviewee reports any challenges with data entry or upload capabilities, clarify, then ask:]

- a. Who has reported and what difficulties have they mentioned?
  - b. How are (or have) these issues been addressed?
33. How about in running reports from the database? Has anybody indicated any difficulties in generating reports or suggested that the reports are not as useful as they might be?

[If interviewee reports any challenges with data management, clarify, then ask:]

- a. What effect is this having on implementation?
- b. What is being done about that? Do you think that will fix things?

### Contractor Referral

One of the primary reasons that we are interviewing the utility staff in such detail is that you are the ones that know what is happening at the highest level regarding processes. All of what we have talked about today will be used as we create both the interview guides, as well as the focus group moderator's guide.

We will be conducting the interviews with a representative sample of all contractors, but we want to be more selective in the selection of contracting organizations that we choose for our focus groups. The factors that are important to us are size (we need to be able to get 8-10 participants, particularly those in management), breadth of service (those contractors who reach across more than one utility service territory), and depth of service (those organizations who offer a full range of services to the LIEE program, from outreach through inspection if possible). It is also important that the organizations that we choose conduct a sufficient amount of LIEE activity that we can be sure that they are thoroughly familiar with the program.

Could you think of 4-5 organizations that you have working for your LIEE program that you believe would be ideal candidates based on these considerations? Both the name of the



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organization as well as some individual that you would suggest that we talk to would be helpful.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**Closing**

34. Are there any things that your utility in particular is doing that you want to brag about? Is there any unique approach or service that you offer that has really worked well for you?
35. What would you most like to change?
36. Is there anything that seems to stand in the way of making those changes at this time?
37. Finally, do you have anything to add? Is there anything I have forgotten to ask you?

Thanks for your time.



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