PROCESS EVALUATION OF SOUTHERN CALIFORNIA EDISON'S BUSINESS INCENTIVES AND SERVICES PROGRAM: PROGRAM YEARS 2006 – 2008

Volume II of II: Supplementary Market Research
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1. INTRODUCTION

This document summarizes the results of targeted market research Energy Market Innovations (EMI) conducted for Southern California Edison (SCE) to inform the redesign and roll-out of its energy efficiency programs for the upcoming program cycle.

This research is supplementary to process evaluation of SCE's 2006 – 2008 Business Incentives and Services (BIS) Program conducted by EMI (Volume I, under separate cover). During the course of the BIS process evaluation, SCE's C&I Segment Solutions Manager noted several programmatic challenges that SCE sought to overcome. These challenges relate to barriers to energy efficiency in two market segments that are well known in this industry: the small businesses and the large commercial office segment. Targeted market research was out of the scope of the BIS process evaluation, but was identified as highly valuable to SCE at a time when such research was needed. This supplementary research was conducted to produce timely, meaningful insight, and actionable recommendations to support of SCE's program planning efforts. EMI presented the results of this research to SCE upon completion, during the summer of 2009. The results of this research are presented in this document as a reference for future planning efforts.

This document includes the results of the three additional targeted market research tasks:

- **Small Business Customer Research:** This task involved targeted market research to inform the development of a small business strategy pilot program.
- **Small Business Direct Install Program Customer Research:** EMI conducted targeted market research to help SCE understand reasons why SCE's small commercial customers refuse to participate in the direct installation program that offers energy efficiency measures at no cost to eligible customers.
- **Large Nonresidential Office Building Literature Review:** This task involved secondary research to assist SCE in understanding the split incentives barrier that is commonly present in large commercial office building market.

The results of these research efforts are discussed in detail in the remainder of this document: Section 2 presents the results of the Small Business Customer Research, Section 3 presents the results of the Small Business Direct Install Program Research, and Section 4 summarizes key studies relating to the Large Commercial Office market.

Supplementary information is contained in the appendices. Appendix A provides summaries of survey respondent characteristics, Appendix B lists key references relevant to both the small business and large commercial office markets, and Appendix C includes the survey instruments for the Direct Install and Small Business customer research.

2. SMALL BUSINESS CUSTOMER RESEARCH

2.1. Objectives and Methods

The small business customer research specifically sought to understand the context behind small business customer participation (or nonparticipation) in SCE's existing energy efficiency incentive programs. The intent of this research was to summarize key findings in the literature and to update that existing information with primary research. The overarching research questions addressed by this research are:

> *What are the primary barriers to program participation?*
>
> *What future support do customers in these hard-to-reach segments need from SCE to reduce barriers to participation?*

EMI found the primary barrier that prevents small businesses from participating in SCE's energy efficiency program is the lack of awareness and understanding of program. While other barriers to participation are present, increasing awareness of SCE's programs among its small business customer base will be the most critical factor for future success.

To address the research questions, EMI summarized pertinent evaluation studies and other secondary research to identify lessons learned and summarize barriers to energy efficiency that are well known in the energy efficiency community. To update and provide additional depth to these findings, EMI also conducted a telephone survey of 102 randomly selected small businesses located in SCE's service area. The objectives of the survey were to understand, first-hand, the primary reasons small businesses participate or do not participate in SCE's energy efficiency program(s) and to develop a more comprehensive and up-to-date understanding of decisions and challenges faced by small businesses today.

Based on the 2008 Potential Study, SCE identified the following five business segments to be investigated as part of this research:

- Restaurants,
- Grocery/convenience stores,
- Retail (non-food),
- Small office, and
- Miscellaneous.[1]

The universe of small businesses for this research is further defined by businesses that meet the following criteria:

- Three tariff rates typical of small businesses (GS-1, GS-2, and GS-2/GS1),
- Less than 100 kW demand,
- Unassigned account, and

[1] Interestingly, 50% of the 58,585 Commercial Miscellaneous sites fell into just one of the four SIC codes. Only those with one of these four SIC codes were included in the survey sample frame.

- Have 15 or fewer locations in SCE's service area.

SCE provided EMI with a data file from CSS that included approximately 309,000 establishments. EMI then eliminated all businesses that did not meet the above criteria. The final "small business universe" database includes roughly 231,000 establishments. The sample design stratified the small business market by business segment; the sample target of 100 completed surveys was split evenly among the five segments.

The small business customer telephone survey was administered during April 2009. Respondents were paid a $25 incentive to reimburse them for the time. Table 2-1 summarizes the small business sample frame and the sample of small businesses that completed a survey for this study.

Table 2-1: Customer Survey Sample Frame and Completed Sample

	Sample Frame		Survey Sample	
Business Segment	**# of Establishments**	**Percent**	**# of Completes**	**Percent**
Grocery	11,304	5%	22	22%
Office	121,792	53%	20	20%
Restaurant	24,657	11%	20	20%
Retail	44,779	19%	20	20%
Miscellaneous	29,185	13%	20	20%
Total	231,717	100%	102	100%

It is important to note here that the contact information for a portion of the establishments included individuals employed by property management companies rather than individuals employed by the businesses served by SCE. The survey was designed to solicit insights from business owners and decisions makers, rather than property management firms; as such, property management contacts were not qualified to participate in the customer survey. This is an important distinction for the reader to be mindful of as they consider the key findings of the customer research.[2]

The remainder of this section presents the findings from this research including a review of the survey results, a closer look at SCE's small business customers as they currently stand, a guide to relevant previous evaluation studies, and an illustration of example program design elements of small business energy efficiency programs. The following section (2.2) presents key findings from the small business survey relating to program awareness and participation. Section 2.3 summarizes notable characteristics of small businesses in SCE's service area that were gleaned from both the customer survey and prior studies. The final section summarizes design elements and delivery strategies that SCE should consider in its efforts to re-design its small business energy efficiency initiative.

[2] Property management contacts were asked if they were willing to participate in future research, and EMI has a retained a database of those willing for future research, if warranted.

2.2. Small Business Customer Research Findings

EMI's research with small business customers focused on awareness of SCE's energy efficiency programs available to small businesses and barriers to participation in these programs.

Overall Program Awareness

Figure 2-1 depicts how each of the 102 surveyed customers is categorized with respect to their self-reported program awareness and program participation. The overarching finding of the customer research is that lack of program awareness is the primary barrier to program participation. Just over half (52%) of the 102 surveyed small business customers were aware of SCE's incentive program. When these "aware" customers were queried further about which specific programs (or program attributes) they were aware of, only 21 referred to a rebate program (in general) or specifically referenced SCE and/or SCE's Express Efficiency incentive program. We determine, therefore, that while about half of the customers indicate they are aware of SCE's energy efficiency program, only 20% have enough specific knowledge about a program to take further action toward program enrollment.

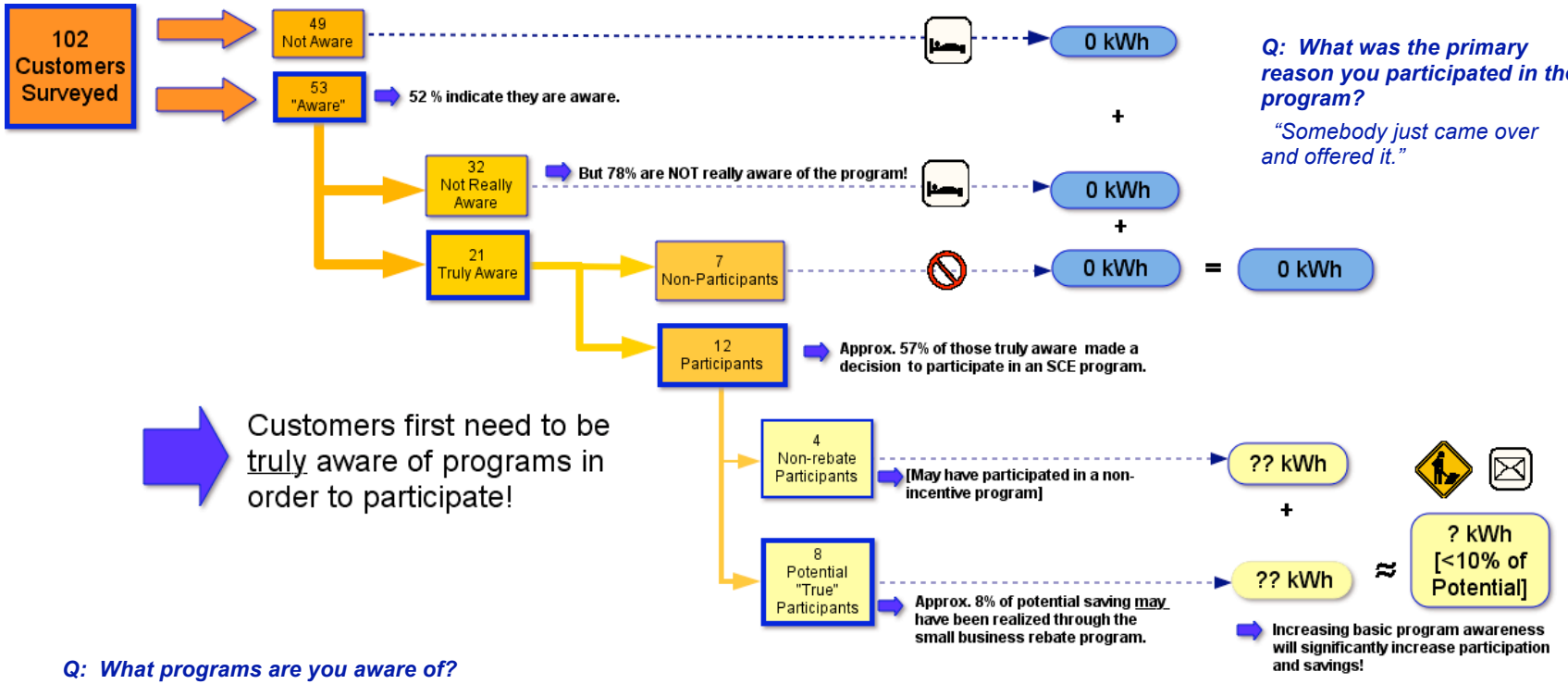
The second notable finding is that one-third of the customers who indicated they were both aware and participated in "the" program said that they did not receive a rebate (perhaps due to participation in a non-incentive program[3]), so we can not say with confidence that they really participated in SCE's program. That leaves us with only 8 of the 102 surveyed small businesses – who are aware and participated in a program that seems to be SCE's incentive program. Figure 2-1 illustrates these findings.

Two key results of this research with respect to program awareness are:

- Only 20% of the small businesses surveyed for this research were truly aware of SCE's energy efficiency incentive program. Increasing program awareness is by far the most critical factor for future success in achieving program enrollment and savings targets.
- Almost 40% of the aware customers reported they participated in and received a rebate through the program. This result suggests that the enrollment rate among customers that are aware of the program is fairly good. Substantial changes in program design or delivery might be less important than a more effective marketing and outreach strategy to increase awareness and understanding of SCE's energy efficiency offerings for small businesses.

[3] These respondents mentioned that they "never received any rebate," "it was free," "it covered all the costs," and they "didn't even have to install equipment."

Figure 2-1: Small Business Awareness and Participation in SCE's Energy Efficiency Incentive Program



Q: What programs are you aware of?

"We are aware of using energy efficiency bulbs, but we are not aware of any specific programs"

"SCE goes to the building and reviews what is needed. It could be light bulbs or ballasts and SCE will pay for the light bulbs and ballasts. Our company pays for the installations."

EMI

Source: 2009 Survey of SCE Small Business Customers

Aside from the lack of program awareness, other barriers were perceptible in the customer survey data, such as some language barriers and some barriers associated with businesses that lease their business space. Reasons vary for why the "aware" customers did not participate in SCE's program, but are consistent with reasons for non-participation that are documented in the literature. For example, these customers did not know about the program at the time they replaced equipment, did not need to replace anything at the time they learned about the program, or did not have enough information. However, the customer survey indicates that these other barriers to participation are much less important in comparison to the lack of program awareness and understanding.

Why "Aware" Customers Do Not Participate

One of the key objectives of this research was to investigate barriers to participation in SCE's incentive program. Aside from the lack of program awareness, other barriers were perceptible in the customer survey data, such as some language barriers and some barriers associated with businesses that lease their business space. Reasons why the 32 "aware" customers did not participate in SCE's program are summarized in Table 2-2.

Table 2-2: Primary Reasons "Aware" Customers Have Not Participated in SCE's Program

Response	# of Mentions [a]	Percent of Mentions
Don't Know	6	21%
Did not know about the program/incentives at the time	5	18%
Do not need to replace any equipment, it all works fine	3	11%
Our type of equipment wouldn't be applicable/covered	3	11%
Electric/energy bill savings do not justify equipment cost	2	7%
Too much time/hassle involved in selecting contractor	2	7%
Need more information/not aware about the program	2	7%
Agreed to participate, but the program ran out of money	1	4%
Building owner/property mgmt. did not approve project	1	4%
Don't care	1	4%
Don't have time	1	4%
Rebates are too low	1	4%
Total	28	100%

a. Responses are available for 28 of the 32 "aware" respondents Of the remaining four, three were not asked this question because they did not know whether they had participated or not. The remaining respondent claimed to have participated (however they could not describe or name the program).

Representative and notable (verbatim) responses to this question are provided below.

"Because [we] don't have any cooking ranges or air conditioning equipment, so the rebate programs wouldn't apply."

"[We do] not have air conditioning. So what is there to do?"

"[We] only change the light bulbs. Do not use air conditioning and feel there isn't anything else to do."

"Because of business times, can't take advantage of any rebates."

"I am aware of the fact that during certain times of day, you can save money by using equipment at that time, but I am not aware of any particular rebate programs."

"I agreed to participate in a program when someone came in here in person, but then I got something in the mail saying that there wasn't any more money available for the program."

Additional Barriers to Energy Efficiency and Program Participation

The small commercial market has typically been viewed as a hard-to-reach market, in part because of the sheer number of customers and the diversity of businesses that comprise the market. Barriers to energy efficiency improvements at small businesses are well known and well documented. However, it is important to note that just the mere mention of theses barriers in the literature and in this document presumes awareness of the program. That is, even if the customer has perfect knowledge of the program and services offered by the utility, there are still additional barriers that might prevent a customer from enrolling in the program and implementing an energy efficiency improvement project. Such barriers to energy efficiency improvements that are documented in the literature are noted below.

Language Barriers. In SCE's territory, small business owners speak many languages other than English. Interestingly, the results of the customer survey do not indicate wide presence of this barrier. Only 36 of the 1,218 businesses (3%) contacted for the telephone survey did not complete a survey because they spoke a language other than English. The language barrier might be more prevalent, however, with respect to reading and understanding program literature and application materials and contracts, rather than conversational English.

Regardless of its magnitude, any language barrier may be possible to overcome, according to one study, through collaborations with community-based organizations (CBOs) and faith-based organizations (FBOs). When CBOs or FBOs speak the native language with the customer, this barrier is often overcome. For example, the evaluation of the SCE's Small Business Energy Connection (SBEC) Program reports that 74% of non-English speaking participants confirmed that the involvement of the CBO or FBO was important in their decision to participate in the SBEC program.

Renting Tenants. Tenants who are renting space may not feel they are likely to remain in the same building long enough to benefit from energy efficiency investments. Although this barrier was found by other research efforts, it does not appear to be a prominent issue among the businesses surveyed for this effort. The SBEC evaluation also found that renters tend to mention more frequently greater hassles of obtaining a utility rebate.

Capital Constraints/Access to Financing. Capital constraints prevent owners from making financially attractive investments. As expected, a good majority of the customers surveyed (64%) indicated that the economic recession has affected their ability to make energy efficiency-related capital improvements.

Some utilities throughout the U.S. – including California and in New England – are implementing on-bill financing programs, which seem to have gained some traction with small business customers.[4]

Lack of Awareness. In addition to customers' unfamiliarity with SCE's program, lack of awareness of the options and opportunities for reducing energy costs, specific high efficiency measures, how to find information about measures, difficulty finding (and trusting) contractors are all barriers that prevent small businesses from participating in utility incentive programs. This is substantiated with results of the customer survey that reveal only 30% of the surveyed businesses consider themselves to be "very aware" of ways to reduce energy use. Almost 40% of the respondents were "very sure" that more energy efficient HVAC, lighting, or refrigeration equipment would save enough energy to justify the initial investment. Interestingly, 60% feel they have the potential to reduce energy use through low-cost / no-cost measures and behavior changes.

Lack of In-house Expertise. If even they are aware, say, that refrigeration systems can be more or less energy efficiency, small business employees often lack the technical knowledge about how to reduce energy costs. This lack of specialized in-house expertise to manage energy use and costs is identified as a barrier in the literature. Only about one-third of California's small and medium business customers have any internal or external staff for managing energy use or costs, and a similar fraction use formal investment analyses to make decisions about equipment purchases or replacements.

Skepticism. Customers – small businesses, in particular – are often skeptical of contractors. Issues surrounding contractor fees, selection, and management act as a barrier to participation in utility programs, particularly if the customer must take full responsibility for measure installation. Skepticism also refers to the uncertainty of energy savings and cost reduction that will result from the measure installation. Past evaluation studies have revealed that businesses, especially renters, are often skeptical of some past SCE incentive programs and were not satisfied with bill savings.

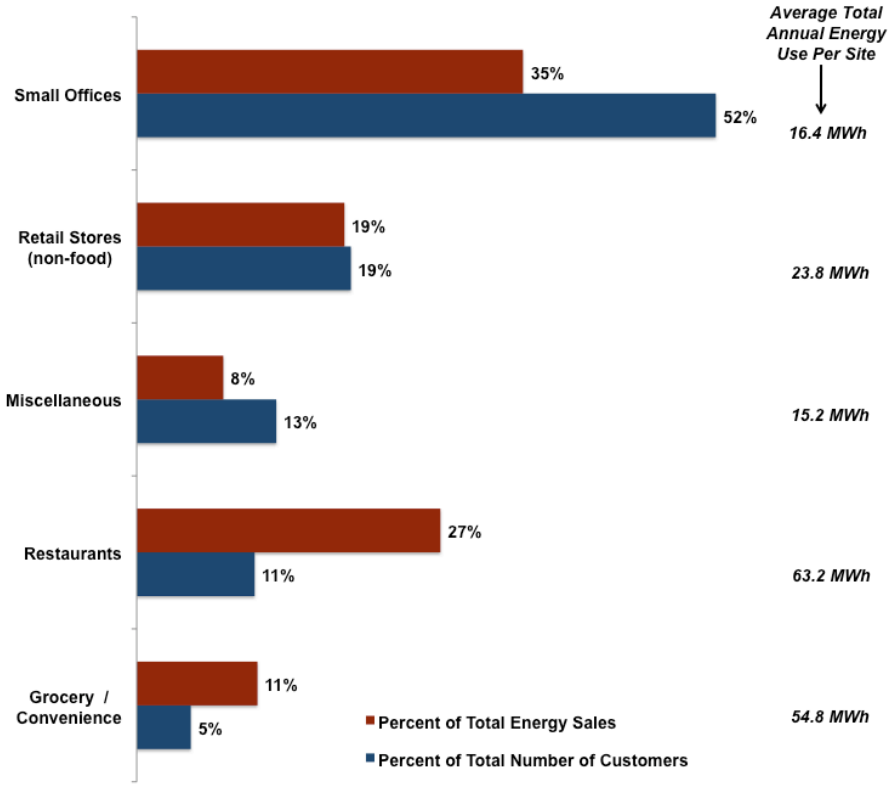
[4] Notably, United Illluminating's Small Business program has experienced a very low default rate. On-bill financing programs are currently in development in mid-western states, including Michigan.

2.3. Overview of SCE's Small Business Market

Taking a step back from the identified barriers to participation, this section summarizes some notable characteristics of the SCE's small commercial market. While there is a great deal of technical and market information available about small businesses with respect to facility energy use and applicable high efficiency measures, program planners and implementers need to be mindful of the context in which small businesses make decisions and strive to succeed is important, particularly for developing a strategic marketing and outreach plan to increase awareness and program participation.

The universe of small businesses defined for this study includes small office, non-food retail stores, restaurants, grocery/convenience stores, and a subset of establishments defined as "miscellaneous commercial." Using CSS data provided by SCE, EMI constructed a small business "universe" that includes over 230,000 establishments. As shown in Figure 2-2, small offices account for 52% of the small business establishments in SCE's territory, but only about one-third of the combined total energy sales across these defined segments. Restaurants account for the second-highest portion of energy sales. Most notable, however, is the comparison of average annual energy use per establishment. As one would expect, restaurants and grocery/convenience stores are more energy intensive that other business types.

Figure 2-2: Distribution of SCE's Small Business Market by Total Energy Sales and Number of Establishments



The relevance of the information presented in Figure 2-2 is two-fold. First, it illustrates the diversity of small businesses with respect to energy use. Second, it provides additional information that will help SCE prioritize program resources to cost-effectively capture energy savings.

Several other characteristics of small businesses are highlighted below. Overall, the customer survey and secondary research underscores that small businesses tend to be guarded and skeptical and rely on those with whom they have trusted relationships (family, friends, etc.) for information about running their businesses. More than a third of the surveyed businesses conduct their own equipment maintenance, repair, and replacement, and they tend to be distrustful of contractors, in general. Additionally, as expected, the majority of surveyed businesses indicated that the economic recession has affected their ability to make energy efficiency-related capital improvements. Observations specific to the general business outlook, building owner/lease characteristics, contractor hiring practices are provided in the remainder of this section.

General Business Outlook. Even though 63% of the respondents indicated their business outlook to be "good" or "excellent," many cited issues and concerns indicating otherwise. That is, either "lack of customers," "lack of income," "lack of work," or "bad economy" was mentioned as the top issue or concern by 73% of the surveyed businesses. Energy bills or utility costs were listed by just 7% of the sample. Not surprisingly, the current economic downturn has affected the ability of many (64%) of the surveyed small businesses to make capital improvements such as upgrades to HVAC, lighting, or refrigeration equipment.

Building Owner / Lease Characteristics. The "split-incentives" barrier, well documented in the evaluation literature, suggests that decision makers are less likely to invest in energy efficient improvements if they do not directly benefit from the resulting reductions in energy costs. It has been suggested that the split-incentives barrier is most prominent when the building owner is the primary decision maker with respect to energy-related equipment purchases or replacements but the tenant is responsible for paying for their monthly energy use. The tenant has an incentive to reduce energy use, but the owner does not.

As shown in Figure 2-3, over half (56%) of the respondents of the customer survey indicated they lease their business property. Interestingly, the majority of leased businesses pay their own electric bill (98%), do not have lease restrictions that would limit their ability to replace/install equipment or make other tenant improvements (93%), and do not have lease clauses that would require them to return the property back to its original state before vacating the premises (83%). Thus, it would appear from this sample of small business customers that the split-incentives barrier is not as prominent as found by other studies.

Contractor Hiring Practices. Past studies reveal that, in general, there are often divided and unclear responsibilities between tenants and owners with respect to payment of energy bills and financing of improvements that reduce energy use. Historically, it has been thought that business customers who own their own space may tend to be more interested in energy efficiency upgrades than those who lease. Contrary to early findings, recent studies pertaining to small business incentive programs reveal most small businesses leasing their space have been found to have a role in the equipment choices affecting electricity bills. This sentiment is also evident from the customer survey conducted for this study. As shown in Figure 2-4, business owners/managers, property management companies, and building owners seem to have equal responsibility or involvement in decisions relating to HVAC, plumbing, or electrical equipment service, repair, or installation/replacement. This is significant for a program outreach strategy that seeks to target key decision makers with program information and collateral. Excluding any one of these central decision influencers or decision makers will likely inhibit program enrollment.

Figure 2-3: Responsibility of Electricity Bill Payment

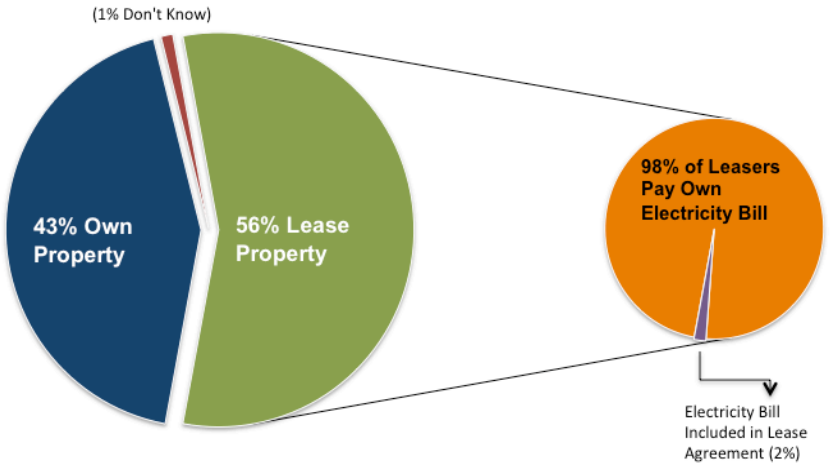
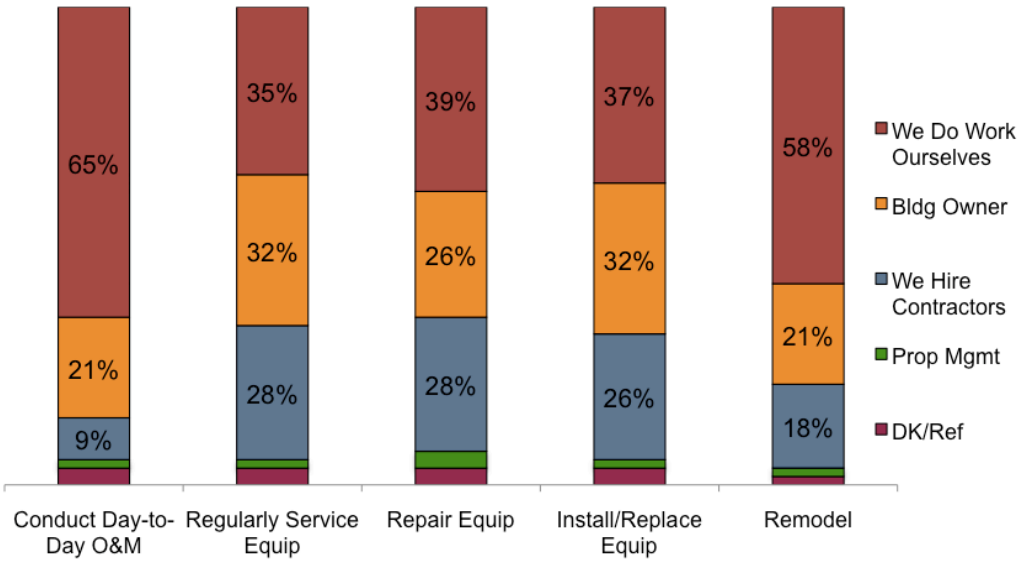


Figure 2-4: Primary Decision Makers for Hiring Contractors for Service, Repair, and Replacement of HVAC, Plumbing, or Electrical Equipment



The remainder of this section offers additional insight into the specific business segments covered by this research. All of these traits are significant from a marketing and outreach perspective.

Small Offices and Retail

Over half (52%) of SCE's small business customers are small offices (law, medical, accounting, etc.) and 19% are classified as non-food retail establishments. Small offices and non-food retail are combined here (and in other studies) because their energy use intensity and relevant energy efficiency measures are similar. That is, both small offices and retail have low average annual energy use per establishment and the energy use is dominated by lighting.

As evident in the survey results (see Figure 2-4) and in other studies as well, most small businesses (office and retail) handle day-to-day building operations and maintenance (O&M) themselves, relying on local contractors for assistance only when needed (Schick, 2002). Therefore, it is important to recognize that third parties that conduct day-to-day O&M services are perhaps not the most effective avenue to reach decision makers for small offices or other non-food retail customers. According to Schick, "directly approaching retail chain and franchise owners may represent the best opportunity to impact this market segment. Other market channels for reaching small office and retail businesses include trade associations or business organizations and community-based marketing efforts" (2002).

Schick's research also mentions that private investors and real estate investment trusts (REITs) that own and lease retail space have large real estate holdings in aggregate, so some economies of scale are possible (Schick 2002). Hence, identifying the true building owners and decision-makers (rather than relying on door-to-door or only contacting the business owner or manager) is especially important for the small office and retail market.

Unfortunately, most often, small office and retail commercial real estate rate lowest in terms of market transformation potential. Small offices are often "lumped together" based on their size, although, as evident in the CSS data and elsewhere, they may be very unlike one another in terms of business types, locations, contractor involvement, and economics of scale (Schick 2002).

Small Grocery and Convenience Stores

As shown in Figure 2-2, 5% of the small business establishments in SCE's territory (defined for this study) are small grocery and convenience stores. These stores include small groceries, bakeries, and convenience stores of all types. The average annual energy usage in the small business sector is 54.8 MWh, considerably higher than the average annual use of small office and retail stores.

Even with high energy-use intensity, small grocers and convenience stores face considerable challenges with respect to energy efficiency improvement. According to a Northwest Energy Efficiency Alliance's (NEEA) BetterBricks Program website, like most small businesses, small and independent grocers are at a disadvantage when it comes to investing in improvements with longer-term paybacks. It is much easier for large chains to make such investments.[5] Moreover, the lack of specific incentives for small grocery and convenience stores to offset incremental costs of technologies and the fact that grocery stores operate on a very thin profit margin makes it difficult for such establishments to undertake any efficiency improvements on their own. In fact, for small grocery stores, the electric bill can frequently exceed profits,[6] and without further assistance these folks are likely to continue not to participate. This assistance

[5] See http://www. Betterbricks.com.
[6] See http://www.sce.com/b-sb/design-services/RTTC/ResearchProjects/supermarket/small_markets.htm.

can come in a number of forms, the first of which is targeting marketing and outreach to effectively increase awareness of SCE's offerings in these specialty settings.

Other challenges to be overcome (or that programs need to deal with) is the fact that a significant portion of grocery and convenience stores in the small commercial market are independently owned an operated and have very few employees. The National Association of Convenience Stores (NACS) reports that California has the second largest number of convenience stores of any state in the U.S.; and roughly two-thirds of these are independently owned and operated. Furthermore, the Bureau of Labor Statistics (BLS) reports that 43% of grocery stores have one to four workers. Likewise, NACS also says, "that 59 percent of (convenience) stores are owned and operated by independent operators" (Innovologie, 2004). These characteristics suggest that small grocers and convenience stores will not have the in-house resources and support (financial or otherwise) for making equipment replacement decisions to decrease store energy use.

NEEA's BetterBricks website also reports that the trend for survival for grocers is to cater to specialized markets (e.g., discount grocers, organic foods, ethnic foods, etc). Indeed, the BLS reports that ethnic grocery stores are some of the fastest growing stores in the country. Such trends point to the growing need to develop marketing and outreach materials and messages that are understood by increasingly culturally diverse customers. This would include (but is not limited to) printed program collateral, printed application materials, equipment information, contractor referrals, website content, etc.

Restaurants

Like the grocery and convenience store segment, restaurants requirement considerably more energy than other segments covered by this study. Even though just over 10% of SCE's small business establishments are restaurants, cooking and refrigeration requirements make this segment the most energy intensive of all the business types covered by this research. One study estimates that an average restaurant consumes 30% to 50% of its electricity for refrigeration, 16% for air conditioning, 12% for lighting, and up to 30% for cooking and baking (Heics and Brownstone, 2006).

Other challenges with respect to program participation and energy efficiency improvements that are unique to the restaurant industry are 1) high rate of business turn-over, and 2) high equipment costs. The former discourages businesses from making significant investments in equipment if new business owners are uncertain that the business will succeed. The latter translates into tendency for small restaurants to buy refurbished equipment rather than purchase new more energy efficient equipment, a common industry practice. This is particularly the case in an economic downturn when more businesses, in general, seek to reduce costs and when business failure rates are high (and failed restaurants liquidate their equipment and supplies).[7]

The unique characteristics of the restaurant industry in terms of energy use, equipment procurement, operating hours, and turnover suggests that SCE should consider an outreach strategy specific to the restaurant industry. Additional research into this segment is warranted, particularly with respect to existing equipment stock, equipment buy-back and recycling options, and perhaps an upstream strategy.

[7] See, for example, http://www.bizjournals.com/boston/stories/2008/07/14/story11.html.

2.4. Summary of Small Business Program Design Elements and Strategies

There are numerous findings from this customer research and the evaluation literature that provide some lessons learned and clues into program delivery mechanisms and strategies that might gain traction with this market. We highlight the few here that stand out as "must-trys," but advocate continued and ongoing discussion to identify a set of strategies that utilize a variety of media, embody a variety of messages, and target all relevant decision makers.

Develop Strategies for Increasing Program Awareness and Knowledge. The overarching finding of this customer research is that a very low percentage of small business customers have enough awareness or familiarity with SCE's program offering to take further action (i.e., participate or seek information about how to participate). As such, this research suggests that developing and testing various marketing and outreach strategies should be a critical element of SCE's program. It will be important for SCE to monitor success of each effort so adjustments can be made if efforts prove unsuccessful. Examples of strategies to explore include:

- Advertising through various channels to increase participation including through email, direct mail, newspapers, online and television;
- Marketing to corporate offices, landlords, property management firms;
- Provide user-friendly program collateral, application materials, installation guides in various languages; and/or
- Develop sector or "segment"-targeted menu and collateral materials and case studies to promote energy efficiency upgrades and SCE's program services.

Develop Targeted Outreach Strategies to Reach Restaurants and Grocery/Convenience Stores. Consider targeted outreach for restaurants and grocery/convenience stores, which have the highest energy use intensities of all business types included in this research. Targeted approaches for these business types, in particular, is warranted because both have specific non-lighting energy use requirements that distinguish them from other businesses. Targeted outreach and marketing should focus on increasing awareness that SCE's program offers incentives for measures that are relevant for their special needs. Additionally, all program collateral and incentive applications should be developed in the most prominent primary languages of these business types.

Leverage Community-Based and Faith-Based Organizations. Evaluations of energy efficiency programs that target the small business sector reveal the importance of community-based and faith-based organizations to gain widespread awareness of the program offerings. Even though survey respondents indicated they would not seek out such organizations for information about energy efficiency, leveraging such organizations as marketing outlets and empowering the CBOs/FBOs to conduct proactive marketing and outreach on behalf of SCE could prove very effective. For example, a successful program administered by We Energies relies heavily on its CBO/FBO partnership network. Notably, single program-sponsored "events" alone are not successful, but conducting a lot of events regularly over a long period of time has shown to create considerable "buzz" and word-of-mouth marketing among the small business community.

Provide Customers with Personal, Direct Support. Like any other business customer, small businesses are more likely to respond to personal, direct service. This is particularly important for small businesses

that do not have assigned utility account representatives and lack the internal expertise afforded by larger businesses. Their reliance on close relationships with trusted colleagues, family, and friends for information underscores the importance of direct personal service to these customers. While such service might not prove cost-effective, SCE might consider the "energy advisor" model that provides a set of "experts" who are on-hand solely to serve the unique needs of specific customers. The "energy advisor" can provide some support in a manner similar to an assigned account manager, but at a level and effort appropriate for small businesses. Several programs throughout the U.S. utilize this model, such as Wisconsin's statewide Focus on Energy program.[8]

[8] See http://www.focusonenergy.com/Business/.

3. SMALL BUSINESS DIRECT INSTALL PROGRAM RESEARCH

3.1. Objectives and Methods

The small business direct install program research sought to understand the primary reasons why small businesses do not participate in SCE's Commercial Direct Install program, which offers high efficiency measures and installation at no cost to the customer, and to identify and summarize best practices and lessons learned of direct install programs administered elsewhere in the U.S.

The overarching research questions addressed by this research were:

> *What are the primary reasons for non-participation in the Direct Install Program?*
>
> *What future support do customers in these hard-to-reach segments need from SCE to reduce barriers to participation?*

To address these questions, the research involved three primary activities: a targeted customer survey, follow-up phone interviews, and secondary research. Each is summarized below.

Customer Survey. In April of 2009, EMI conducted telephone interviews with a randomly selected sample of customers that had declined the Direct Install program offer between January 2007 and December 2008. The population of "refusers" defined for this study included any SCE commercial customer in the 0 – 99 kW demand use category that was presented with but refused the direct install offer, as tracked by the program implementation contractors, FCI Management Consultants and California Retrofits, Inc. (CRI).

SCE provided EMI with two data files of customers who declined to participate in the Direct Install Program. The file of customers who had refused Direct Install offers made by CRI contained 1,732 observations, and the file for FCI contained 382 observations, for a total of 2,114 business locations. Among other things, the data provided included the following fields: name and address for each location, contact name and phone number, and dates indicating when the customer was contacted, when the survey of the business occurred, a completed date, and an invoice date.[9] The files also contained information regarding the type of measure that was offered (refrigeration or lighting end uses), and the project phase (all were indicated as "Drop-Outs").

EMI first cleaned the data by deleting duplicate observations, records without telephone numbers, records with duplicate contact names, and records with duplicate phone numbers (retaining the observation with the most recent contact date). To avoid multiple phone calls to the same establishment, observations that

[9] Although the file contained completed and invoiced fields, these fields were largely missing data, as would be expected. Fifty-eight observations contained a completed date and twenty observations contained an invoiced date. The Program Manager assured the evaluation team that these were data entry errors, and these fields should not have any dates entered.

appeared in the sample frame for the Small Business survey effort were also deleted. As shown in Table 3-1, the final survey frame included 1,179 records.

Table 3-1: Survey Frame and Completed Survey Sample

	Sample Frame		Survey Sample	
Installation Contractor	**# of Sites**	**%**	**# of Completes**	**%**
CRI	961	82%	82	82%
FCI	218	18%	18	18%
Total	1,179	100%	100	100%

The surveys were administered via telephone during late April 2009. EMI focused efforts on the most recent "refusers," beginning with 2008 and moving to the 2007 sample once the 2008 sample was exhausted.[10] This approach was taken to increase the completeness and accuracy of responses, as customers would be more likely to recall the details of the Direct Install offer if it occurred more recently, rather than two or three years in the past. To ensure an adequate response rate in a relatively short time period, each survey respondent was offered an incentive of $25 in exchange for his or her participation.[11] As shown in

Table 3-1, the final survey sample included 100 respondents; 82% were contacted by CRI and 18% by FCI.

Follow-Up Customer Interviews. EMI also conducted follow-up phone interviews with a subset of the survey respondents to clarify and confirm responses of the customer survey described above. These interviews took place immediately following the completion of the phone surveys described above, during the first week of May 2009.

Secondary Research. In addition to the primary research, EMI reviewed publicly available evaluations and program documents for programs with similar features as SCE's Direct Install program. An important finding of this research, which will be discussed later in further detail, is that stand-alone direct install programs, such as SCE's, do not appear to be common for the nonresidential sector. The research provides value to SCE in that it provides context, information about the range of delivery strategies, and highlights key strategy-focused findings applicable to direct install programs.

[10] The sample design did not stratify by year of contact. The final sample frame included 407 storefronts that refused the direct install program offer in 2008 and 772 that refused in 2007.

[11] The survey was offered in both English and Spanish.

3.2. Small Business Direct Install Customer Research Findings

As indicated previously, the intent of the customer research was to evaluate the reasons for non-participation in the Direct Install program. Thus, the respondents of the survey were thought to be "refusers" of the offer for free installation of energy efficiency measures. However, the two overarching findings of this research are the following:

1. The dataset provided to EMI incorrectly identified customers who reported they agreed to participate as "refusers" of the direct install offer; and
2. Equipment was not installed for one-third of the customers who reported they agreed to participate.

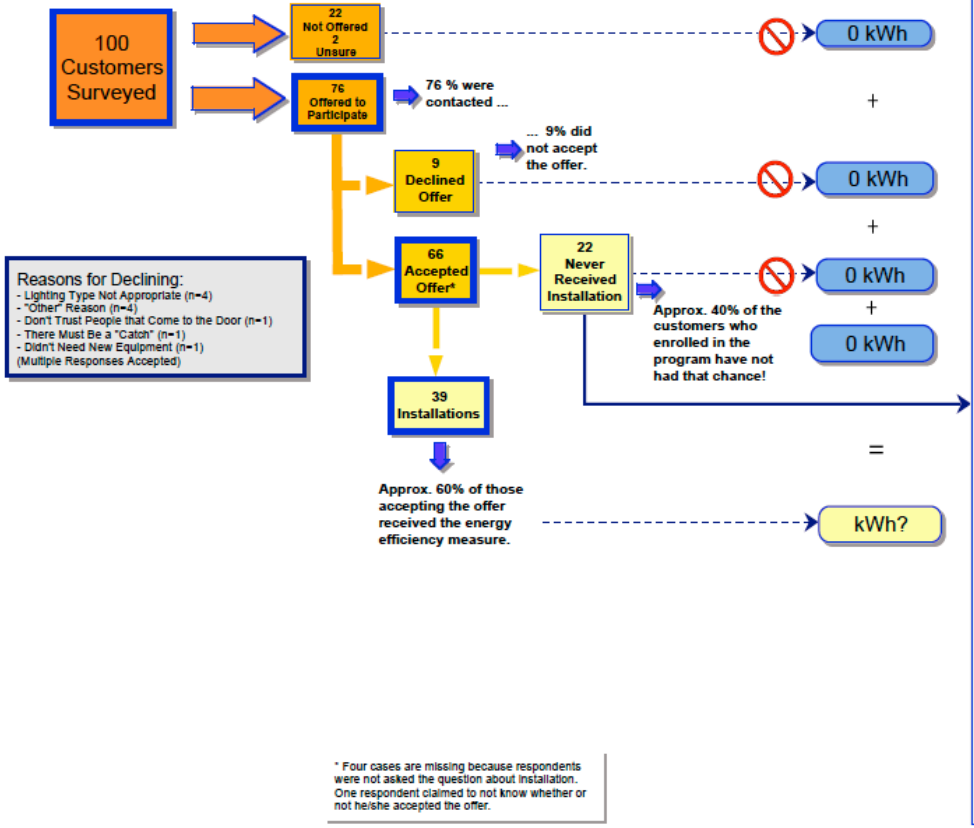
Figure 3-1 illustrates how the 100 survey respondents fall into various direct install participation categories. It clearly illustrates the imbalance between "refusers" of the offer, "accepters" of the offer, those that received the installation after accepting the offer, and those that should have received the equipment but did not.

Beginning at the uppermost left box, EMI surveyed 100 customers who were randomly chosen from the databases of "refusers" provided by SCE. Of these 100 customers, 76 (76%) indicated that they remembered the program offer, and 22 customers did not remember the offer. (The remaining two did not know.) Overall, 66 out of the 76 who indicated they received the offer said that they agreed to participate; while nine customers (9% of the total number of survey participants or nearly 12% of those that received the offer) said they declined the offer. Examples of the reasons "refusers" gave for denying the offer are also shown in the figure.

Surprisingly, Figure 3-1 also shows that only 39 of the 66 "accepters" confirmed the equipment was installed. Of the remaining 27, 22 (approximately 40% of those that accepted the offer) reported that the equipment was never installed.[12] The right portion of Figure 3-1 includes verbatim comments made by those customers who accepted the offer but did not receive the installation. The figure shows that these missing installations were mostly due to the fact that the contractors did not return to install the equipment or that the contractors did not have the proper installation equipment. Detailed information relating to these and other findings are outlined in the rest of this section.

[12] The remaining five consisted of four customers who were not asked the specific question about receiving installation; one customer did not know.

Figure 3-1: SCE Direct Install Customer Program Participation



Q: "Do you know why the equipment was not installed?"

"Edison **never got back to us**"
"Rep showed up alone, **didn't return** with help to complete the job."
"They tried to charge $300 dollars, even after they said it would be free."
"They just **never came back**."
"They ran out of funds or something. We went ahead and changed some of the lights ourselves."
"A few years ago, somebody said he would change the lights, but he **never came back**."
"The church took a lot of time with the contractor and accepted the lights, but they **never returned**."
"The vendor came by and partially installed the lighting and **never returned**."
"They were offered three times...but they **never followed through**. They called to ask why. They were too far down the list."
"They set up a date to do the exchange. They came back three times saying they needed to order the new equipment. **Work was never done**."
"Said they would be back but **didn't follow through**."
"Didn't qualify because the lights were different."
"They got **no response**. They even tried to call but the offer was dropped."
"They were overwhelmed by the response, and never got back to us. Still have enough material they left him. He tried to pursue the program but **nobody ever followed up**."
"Too large of a business and Edison wouldn't make any money. They said there were too many light fixtures."
"Signed the papers, but they **never came back**."
"Edison **never came back**."
"They had **difficulties making the renovations due to the height** and also the height of the cabinets."
"They didn't install them, because they **didn't have a ladder** to access the lights."
"They could only change the easy ones and not the ones outside and I told them to either do all of them or none, so they didn't do it."
"**They never came back**. Later some relatives told me they saw the Edison guy sell lights really cheap to somebody they knew and that really bothered me."
"They came and offered to do the changes but when they were here they asked me to sign the form and that they were sorry but couldn't do it because **the lights were too high**. Then they left."

CONTRACTORS NEED TO:
1) GO BACK ONCE THE OFFER HAS BEEN ACCEPTED,
2) HAVE THE CORRECT EQUIPMENT AND LADDERS,
3) EDUCATE CUSTOMERS ON ACTUAL OPTIONS AND BENEFITS OF DIRECT INSTALLATIONS.

Building Owner / Lease Characteristics

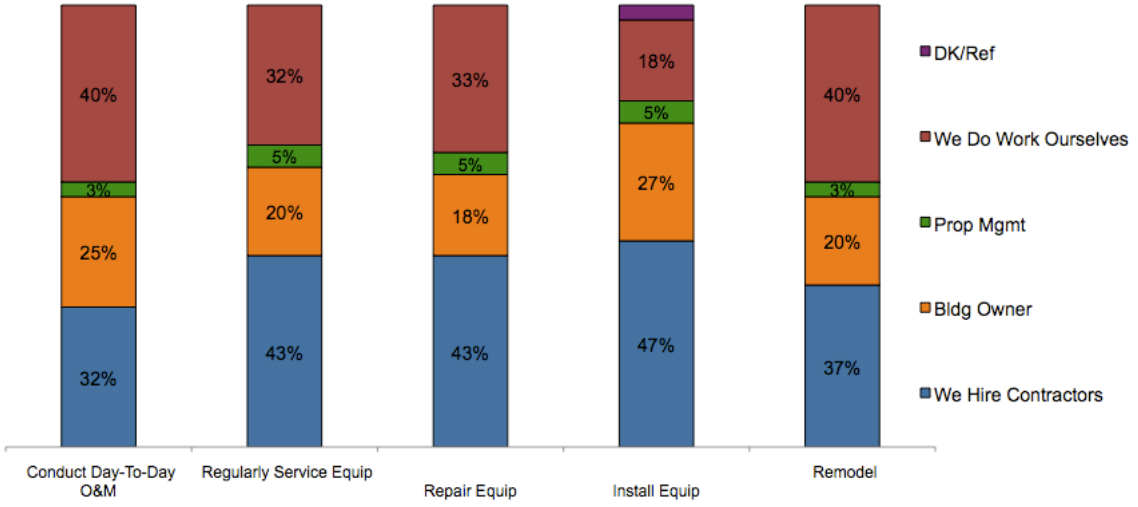
The "split-incentives" barrier, well documented in the evaluation literature, suggests that decision makers are less likely to invest in energy efficient improvements if they do not directly benefit from the resulting reductions in energy costs. It has been suggested that the split-incentives barrier is most prominent when the building owner is the primary decision maker with respect to energy-related equipment purchases or replacements but the tenant is responsible for paying for their monthly energy use. The tenant has an incentive to reduce energy use, but the owner does not. The split incentives barrier is not likely an issue associated with SCE's Direct Install program because the program offers equipment at no cost to the customer. However, decision-making practices and lease restrictions can be important factors in a customer's decision to participate, regardless of the incentive structure.

Past studies reveal that, in general, there are often divided and unclear responsibilities between tenants and owners with respect to payment of energy bills and financing of improvements that reduce energy use. Historically, it has been thought that business customers who own their own space may tend to be more interested in energy efficiency upgrades than those who lease. Contrary to early findings, recent studies pertaining to small business incentive programs reveal most small businesses leasing their space have been found to have a role in the equipment choices affecting electricity bills. This sentiment is also evident from the customer survey conducted for this study.

Over half (60%) of the respondents of the customer survey indicated they lease their business property. Interestingly, all leased businesses pay their own electric bill; while the majority of customers do not have lease restrictions that would limit their ability to replace/install equipment or make other tenant improvements (85%). Furthermore, the majority of those that can make tenant improvements also do not have lease clauses that would require them to return the property back to its original state before vacating the premises (67%). Thus, it would appear from this sample of small business customers that the split-incentives barrier is not as prominent as found by other studies.

As shown in Figure 3-2 business owners/managers and building owners seem to have at least equal (and likely more) responsibility or involvement in decisions relating to HVAC, plumbing, or electrical equipment service, repair, or installation/replacement. Property managers have a small percentage less responsibility in making these decisions. This is significant for a program outreach strategy that seeks to target key decision makers with program information and collateral. Excluding any one of these central decision influencers or decision makers will likely inhibit program enrollment.

Figure 3-2: Primary Decision Makers for Hiring Contractors for Service, Repair, and Replacement of HVAC, Plumbing, or Electrical Equipment



Customer Acceptance and Missing Installations

A rather puzzling finding of this research is the high percentage of customers who reported they accepted the Direct Install offer, which contradicts the program tracking data provided to EMI. The preliminary findings of this research also reveal an unexpectedly high percentage of customers who reported they accepted the Direct Install offer but the equipment was not installed. Explanations for such occurrences indicate there may be systematic issues relating to eligibility screening and contractor practices, as well as tracking and reporting issues.

As shown in Figure 3-3, nine of the respondents who remembered the offer declined to participate in the program. The reasons provided for not participating include the wrong type of lighting, lack of trust in the contractor, the belief that "there must be a catch" and the lack of a need for new equipment. As Figure 3-3 illustrates, there was no stark distinction between the successes of making the offer between the two contractors.

Figure 3-3 illustrates the differences between acceptance of the offer between the two contractors FCI and CRI. Other than the number of offers being made per contractor (CRI made more offers to these 100 customers), there appears to be no indication that customers are accepting offers from one contractor more often than the other.

Figure 3-3: Respondents' Acceptance of the Direct Install Offer by Contractor

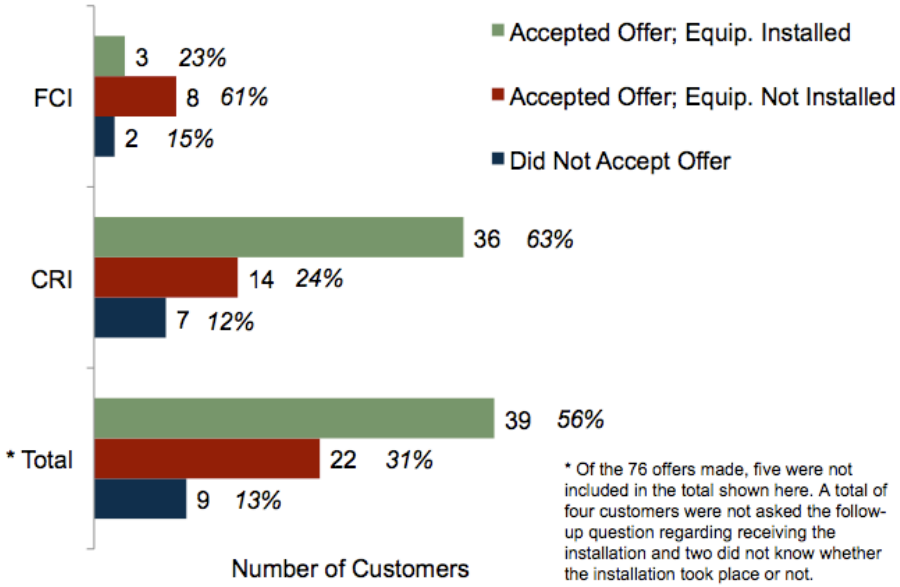


Figure 3-3 also reveals that 22 of the 66 respondents reported that they accepted the program offer but the equipment was not installed. Two primary trends are evident from these responses, including the following:

- ***Contractor never returns.*** Over half of the 22 respondents explained the contractor did not return to install the high-efficiency lighting equipment after the initial audit and offer.
- ***Contractor did not have the proper equipment.*** Three of the respondents reported the equipment was not installed because the contractor/installer could not reach the height necessary.

Additionally, Figure 3-3 portrays that neither CRI nor FCI followed through with installations for all customers that accepted the offer. This is most extreme in the case of FCI, though the sample size is relatively small (11). The survey results indicate that equipment was not installed for eight out of 11 (73%) FCI-affiliated respondents that accepted the offer. This finding was somewhat the reverse for CRI, as only 15 out of 51 (29%) of those that accepted the offer from CRI did not receive the installation.

Customer Preferences Impacting Outreach Strategy

This section provides insights into customer preferences with respect to the method and timing of the initial contact as well as the time of year customers are most likely to make facility improvements. The information presented is intended to help the program more effectively communicate the offer and base the timing of the offer on the preferences described below.

Respondents in the survey were asked about whether or not they had a computer with access to email or the Internet. As one might expect, it is clear that computer access is fairly common among those surveyed. Figure 3-4 shows this to be the case. Interestingly, though the majority of respondents have

computers with email or Internet and check email often, only four out of the total 100 surveyed said they had completed SCE's online energy survey in the past.

Figure 3-4: Respondents' Access to Computers and Internet

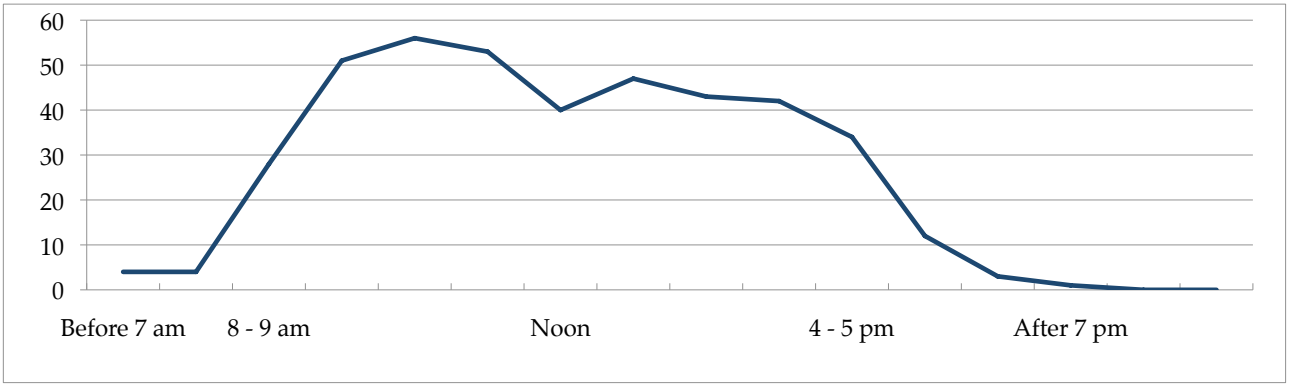
Survey respondents were also asked about the time of year in which they are most likely to make improvements. Overall, the findings in Table 3-2 indicate that summer is the optimal time for a quarter of respondents, whereas during the fall they are least likely to make improvements. The survey also asked respondents about the time of day they prefer to be contacted. The results indicate (shown in Figure 3-5) that late morning or early afternoon are the best times of the day to call or stop by and visit small businesses, with the hour between 10 am and 11 am being the most preferred time. Recognition of these preferences in timing both in terms of time of year and time of day will benefit the program's marketing and outreach strategy. Twelve of the respondents did not specify a time of day they preferred to be contacted. Instead, they offered responses such as call ahead/by appointment or any time. These responses illustrate that customer preferences depend to a certain extent on factors other than time.

Table 3-2: Time of Year for Improvements

"What time of year are you most likely to make improvements for your business?"	# of Mentions
Summer	25
Winter	17
Spring	6
Fall	3
As Needed	18
Depends on Money/Business	5
Other	11
None/Never	21
Don't Know	3

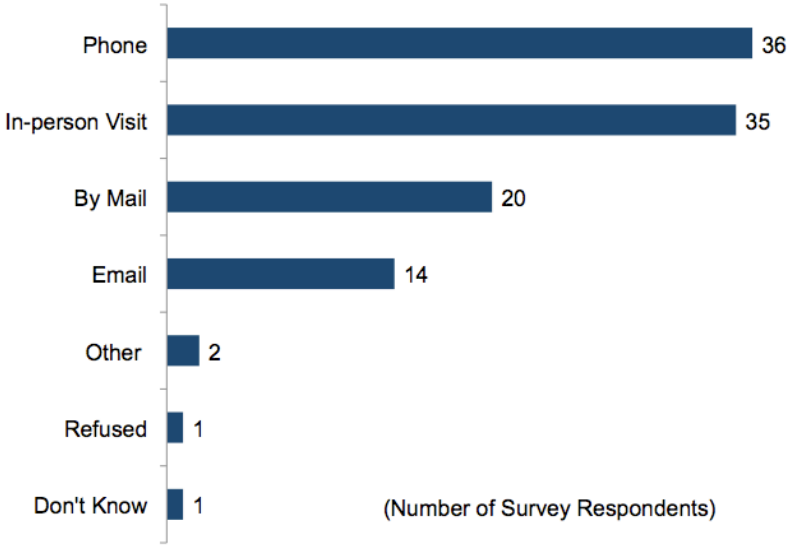
Multiple responses were accepted.
"Other" includes responses that did not fit into any of the above categories. For instance, one respondent was speaking on behalf of a museum and said, "Not really, maybe when they put in new exhibits." Another response of the "other" type was "Every five years."

Figure 3-5: Preferred Time of Day for Contact



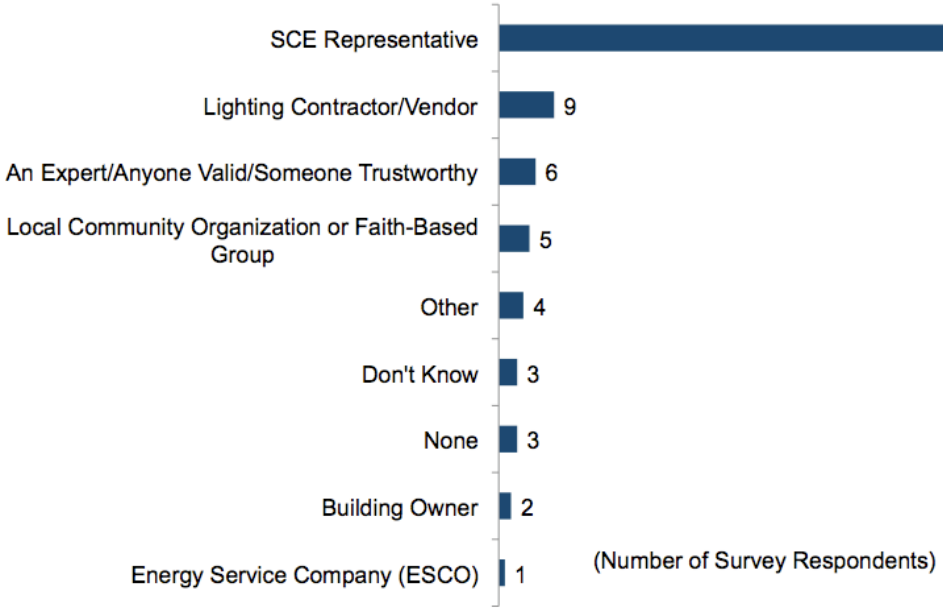
EMI also asked respondents how they would prefer to be contacted by SCE in the future. The two most occurring responses were "direct" contact means, including by phone and in-person visits. The results suggest that direct contact is much more preferred than less personal means, such as mail or email. These findings are portrayed in Figure 3-6.

Figure 3-6: Preferred Method of Contact for Program Information



Finally, respondents were also asked a question about whom specifically they would trust in making suggestions about changing lighting at their business or organization. As shown in Figure 3-7, by a wide margin, the most common response was an "SCE Representative." Though "contractor" was the second to most common response, only nine respondents gave this response, compared to 76 who gave the "SCE representative."

Figure 3-7: Trusted Sources for Information for Energy Efficiency Improvements



3.3. Small Business Direct Install In-Depth Interviews

Given the perplexing results indicating that not all respondents had declined to participate in the program as originally thought and that some respondents reported equipment was not installed, EMI conducted follow-up interviews with a subset of survey respondents. The objectives of these interviews were to 1) verify that information collected by the customer survey was correct and 2) determine why equipment had not been installed for some of the respondents who had accepted the offer. Specifically, EMI verified that the offer for free lighting and installation came from someone representing SCE as opposed to another organization. EMI also asked respondents if they could recall the specific name of the contractor who made the offer. If the respondent accepted the offer but equipment was not installed, the interviewer sought to understand the circumstance. If equipment was not installed because the contractor did not show up at the scheduled time, the interviewer asked the respondent if there was any follow-up or attempt to reschedule.

In addition to contacting survey respondents who reported to accept the offer, EMI contacted four customers who had not been contacted at all for the original survey. We would expect that some of these new calls would reach customers who had accepted the offer, and some who had installed equipment, and this was the case.

Results of the follow-up interviews substantiated findings of the customer survey. In fact, it appears from the findings that the contact list included customers that both accepted and refused the program offer. Moreover, as illustrated in the previous section, some of the customers who reported they accepted that offer actually received the equipment; others did not.

Table 3-3 summarizes the findings of these follow-up interviews in detail. The table presents findings related to customers' knowledge about the acceptance of the offer and the contractor who approached them with the offer (if applicable). A total of thirteen customers were contacted for these follow-up calls. Of these 13, nine were respondents of the customer survey discussed previously. Eight verified that someone representing SCE made the offer, but four could not verify the name of the contractor.

Of the four interviews with customers not contacted previously for the customer survey, one reported they refused the offer; one reported they accepted the offer and had the equipment installed; and two refused to answer or claimed to have not been contacted regarding the offer.

Table 3-3: Summary of In-depth Interviews

Respondent Classification	Verified Assoc w/ SCE	Verified Contractor (FCI or CRI)	Not Sure of Contractor Affiliation	Refused or Do Not Recall Offer	Total
Customer Survey Respondents					
Accepted Offer, Equip Not Installed	1	2	1	-	**4**
Accepted Offer, Equip Installed	3	2	-	-	**5**
Customers Not Contacted for Customer Survey					
Were Not Contacted or Do Not Recall Offer	n/a	n/a	n/a	2	**2**
Contacted, Did Not Accept the Offer	1	-	-	-	**1**
Accepted Offer, Equip Not Installed	-	-	-	-	**0**
Accepted Offer, Equip Installed	-	1	-	-	**1**
Total	**5**	**5**	**1**	**2**	**13**

As shown in Table 3-3, four interview respondents explained that they accepted the direct install equipment offer but the equipment was never installed. Additional explanation regarding each incident is provided below:

- One customer explained that the contractor said the job was "too big" and that he would come back with "more people," but never came back. The respondent explained that they never received any explanation or additional follow-up from SCE or the contractor.
- A second customer explained that the contractor set up an appointment to install the lighting equipment but never showed up during the scheduled time period. Upon calling SCE, the respondent was then told that they did not qualify for the program. The respondent did not recall why they did not qualify for the program.
- The third customer explained that after the contractor did not show up to install the equipment, they called the contractor and learned that the program was out of money and had been

suspended. The customer verified this with SCE. SCE noted she would be contacted when the program resumed, but it has been almost a year and no one has contacted her yet.

- The fourth customer who accepted the direct install equipment off explained that the contractor told them that there were so many jobs they would not be able to schedule an appointment to do the installation. The contractor said they would contact the respondent later to put them on a schedule, but the respondent has not yet heard back.

3.4. Summary of Direct Install Program Strategies

This section provides a summary of a brief research effort undertaken to review information related to *best practices* for direct install energy efficiency programs. A primary reference for this research is the National Energy Efficiency Best Practices Study (NEEBPS).[13] Information from this study has been supplemented, where possible, with information gleaned from papers contained in the 2008 ACEEE and the 2007 IEPEC proceedings. We first provide an overview of direct install programs, followed by a summary of key strategies.

Overview of Direct Install Programs

As noted in the NEEBPS, turnkey or direct installation programs targeted at smaller customers were experimented with in the early to mid-1990s but were largely abandoned due to their higher cost (particularly as viewed from a Utility Cost Test perspective) as compared with the significantly lower costs of lighting savings easily attained from large customers through prescriptive and custom rebate programs. Turnkey, direct installation programs have experienced a resurgence, particularly in California, in response to two policy objectives: responding to the energy crisis with aggressive programs that achieve immediate, cost-effective savings; and ensuring that smaller customers receive program benefits commensurate with their contribution to the public goods funds (NEEBPS, 2004).

Turnkey programs, some of which are also referred to as Direct Installation programs, are designed to have all program aspects, from the initial marketing and ensuing audit process through the final equipment installation, conducted by a third party, typically a lighting contractor. In direct installation programs, a single or small pool of approved contractors is charged with the program implementation components of implementation, marketing, and recruitment. Program participants are not responsible for the application process, hiring contractors or developing project specifications. Turnkey programs often cover 75 percent or more of the cost of an energy efficiency retrofit under the rationale that high incentives are necessary to induce participation by small customers and that a high participation rate is required to justify the site-specific marketing involved in the program model (NEEBPS, 2004).

With lighting being the most prevalent end use in the small commercial market, many of the direct install programs focus largely on lighting measures only (T-8 retrofits, CFLs, exit signs, occupancy sensors). A few direct install programs appear to also offer minimal HVAC related measures. Additionally, more focused programs have emerged in recent years that endeavor to address very specific end uses and/or target markets. Examples of these niche markets direct install programs include:

[13] Quantum Consulting, Inc. *National Energy Efficiency Best Practices Study. Volume NR1 – Non-residential Lighting Best Practices Report.* December 2004.

- Hotels and Motels (lighting, occupancy controls),
- Groceries (overhead, refrigerated case lighting), and
- Restaurants (lighting, pre-rinse sprayheads).

Table 3-4 provides a list of programs identified through an Internet search and review of conference proceedings.

Table 3-4: Examples of Small Commercial Direct Install Programs

Program Name	Utility	Reviewed in Best Practices Study?
Direct Install Program	New Jersey (Statewide)	N
Direct Install Program	APS	N
Small Business Direct Install	New York (Statewide)	N
Small Business Direct Install	LADWP	N
Small Business Energy Advantage	Northeast Utilities	N
B.E.S.T. and SureBet Programs	KEMA – XENERGY	Y
EZ Turnkey Program	SDG&E	Y
Small Commercial Prescriptive Lighting Pgm	SMUD	Y
Energy Fitness Program	PG&E/ABAG	N
RightLights Program	PG&E	N
Small Business Direct Install Program	Consumers Energy	N
Small Commercial Programs (gas and electric)	We Energies	N
Direct Install and Maintenance Programs	Puget Sound Energy	N
CA Local Government Partnerships	(multiple)	N

An important finding arising from this research is the fact that there appears to be very little updated information assessing Direct Install programs and, in particular, very little best practices research. The NEEBPS, for example, is organized by sector and does not call out direct install programs in a specific volume. Rather, direct install programs are found sparingly within the nonresidential lighting report and in a few stand-alone program summaries. As such there is limited information available truly comparing and contrasting program designs, implementation approaches, and financial incentives. Hence, the industry may benefit from a comprehensive analysis of these programs and a more complete documentation of lessons learned.

Key Strategies

In reviewing the available information related to recommended strategies, it became clear that SCE is already addressing many of the important strategies identified in the literature. The 2010 – 2012 Program Implementation Plan (PIP) for the SCE Commercial Direct Install program highlighted a handful of best practices based on the 2006 – 2008 program results as well including the following:

- Keep messaging and participation simple for the customer,
- Understand the key motivators that drive an industry and use that information to market the program,
- Increase program visibility to targeted customers,
- Contact targeted customers through identified organizations and associations,
- Maintain a high level of customer service by providing customers with assistance with vendor management and other no-cost / low cost recommendations, and
- Identify qualifying products simply and effectively.

A paper highlighting experiences in New England provides a solid conceptual framework for understanding market barriers and direct install program elements. [14] A summary of this framework is provided below in Table 3-5.

Table 3-5: Market Barriers and Direct Install Program Design Features

Market Barrier	Design Feature
Low motivation to reduce energy costs	Financial incentives and neutral case flow financing
Inadequate time and technical expertise to decide about energy efficiency investments	Turnkey installation through contractors
Insufficient financial resources to invest in energy efficiency	Zero-percent financing and attractive incentives
Difficult to reach	Aggressive, contractor-led marketing
Lack of understanding of energy efficiency	Education and Case studies
Performance concerns	Utility oversight and backup support

Adapted from Ghandi, et al. (2008)

A review of recent literature reveals three key areas that are important considerations in developing and managing direct install programs:

1. Contractor management,
2. Incentives, and
3. Marketing.

Contractor Management. The NEEBPS identifies two sub-types of turnkey programs, those that use only one or two contractors working for the program implementation organization to complete all customer related tasks, and those that use multiple contractors. In both cases, participating contractors typically agree to perform program-related services for a specified fee and adhere to a standardized measure cost price list. In some cases, contractors are simply encouraged to use the standardized prices

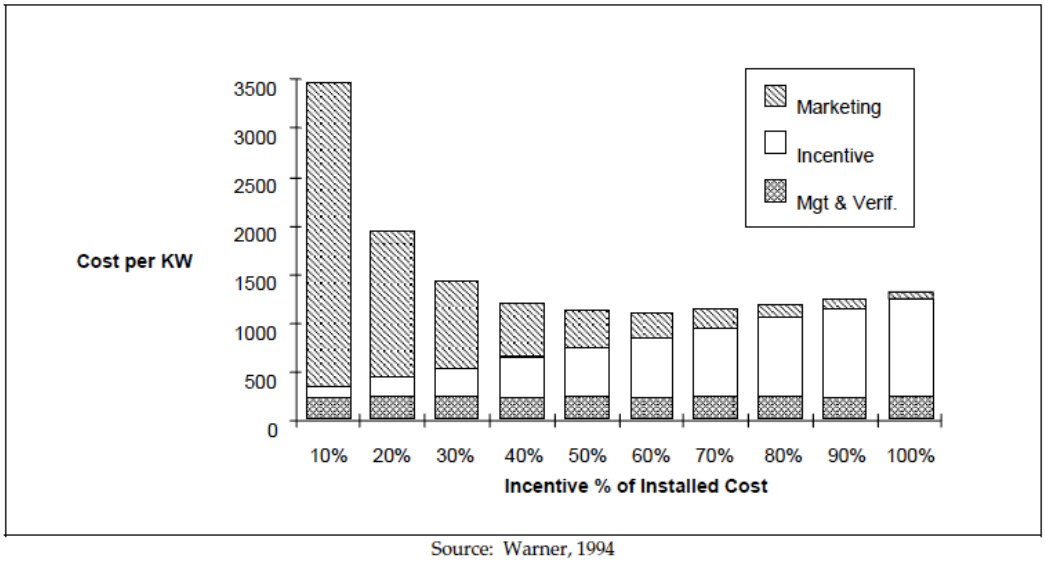
[14] Ghandi, Nikhil, et al. *On-Bill Financing of Small Business Energy Efficiency: an Evolving Success Story*. ACEEE 2009.

through faster application processing. Exceptions to the standardized prices are allowed, but must go through an individual approval process. SDG&E's EZ Turnkey is an example of a program that used one or two contractors for all site-related services – one firm conducts the marketing and audit and another performs the installation. SMUD's Small Commercial Prescriptive and KEMA-XENERGY's BEST used pools of pre-qualified contractors to conduct program marketing and all of the site work, including the audit.

In direct installation programs, a single or small pool of approved contractors is charged with facility assessments, equipment installation, and completing paperwork for the customer. The program management role of the program implementer is to review vendor proposals and perform post-installation verification and/or quality control. Turnkey programs usually require fewer management resources than traditional rebate programs, an advantage for utilities with small program staffs. Utility coordination with turnkey contractors is a key management issue in direct installation programs.

Incentives. As the NEEBPS shows, direct installation programs likely make economic sense only if the incentive levels are 40% or higher. In fact, direct install "programs often cover 75% or more of the cost of an energy efficiency retrofit under the rationale that high incentives are necessary to induce participation by small customers and that a high participation rate is required to justify the site-specific marketing involved in the program model" (NEEBPS, 2004).

Figure 3-8: Direct Installation Program Costs



Source: Warner, 1994

The NEEBPS also points out that "the success of SDG&E EZ Turnkey and KEMA-XENERGY B.E.S.T. reaffirms previous research showing that participation and adoption rates increase non-linearly as financial incentives increase, and that direct installation programs are well suited to achieving high program penetration rates in the small commercial market (Warner 1994; Mosenthal and Wickenden 1999)."

Moreover, the cost per kWh saved is fairly constant for incentive levels between 50% and 80%. Increasing the incentive from 50% to 80% provides additional energy savings without increasing relative costs. Because this also minimizes lost opportunities, many implementers believe that the 70% to 80% incentive level is optimal for the direct installation program model (NEEBPS, 2004). Figure 3-8, also

taken from the NEEBPS, stems from previous research that shows the relationship between program costs and incentives.

Marketing. The NEEBPS highlights the use of door-to-door marketing by a turnkey vendor to achieve a high penetration rate for direct install programs as well as other small commercial programs. The study states, "face-to-face marketing and turnkey services reduces the hassle and information search costs for small businesses that might otherwise not participate. However, this approach is usually only cost-effective if combined with very high incentive levels." The study also mentions that this type of marketing is fairly common among direct install programs stating that these "programs, which often serve a local population or tightly drawn market of very small customers, often send marketing staff, auditors, or contractors door-to-door for customer leads." The NEEBPS, as well as a study of the SDG&E EZ Turnkey Small Business program, mentions that separating the implementation and the audit features may result in "better customer service overall" as noted by a SDG&E staff member. The SDG&E program has continued to do this for some time, and stakeholders felt "that having two different contractors is necessary" (ECONorthwest, 2006).

The NEEBPS goes on to state, "recognizing the importance of contractors and the limits of mass marketing in the small commercial market, all of the turnkey programs [reviewed in the Best Practices study] relied on door-to-door marketing. For SDG&E EZ Turnkey, audit contractors went door-to-door to pre-qualified customers, making cold-call contact with a list of pre-qualified customers. Most participants learned about the program through walk-in contact by a technician, who described and explained the program, conducted an audit, demonstrated products to the customer, gave them a list of free program eligible measures and, in many cases, signed up the customer. KEMA-XENERGY and Connecticut Light & Power have also found success with turnkey contractors that perform door-to-door marketing to small customers." (NEEBPS, 2004)

Summary

The Direct Install program implemented by SCE appears to already address many of the best practices identified in our review of available literature. However, with the increased prevalence of these programs, and as utilities attempt to reach deeper into the small business markets, it may be time for an updated review of program experiences and lessons learned. There is an opportunity in this for SCE to work together with other utilities to compile this information and, potentially in collaboration with a national organization such as ACEEE, develop a national database of direct install programs.

4. SUMMARY OF LARGE COMMERCIAL OFFICE MARKET STUDIES

4.1. Objectives and Methods

This section presents a brief review of literature focusing on large commercial office buildings within the nonresidential market.[15] This research specifically sought to understand the key decision-makers in the large commercial office market, strategies for addressing these decision-makers, and insight into how utilities might overcome the *split-incentive* market barrier.

There have been substantial contributions to the energy efficiency industry literature over the past decade with respect to the large commercial office sector. EMI investigated many conference papers, evaluations, and market studies and identified three studies, in particular, that directly addressed the research objective identified for this research effort. EMI focused our efforts solely on these three reports because they were authored by individuals with extensive expertise in the large commercial real estate market, they directly addressed market structure and decision making practices in this sector, and are fairly recent.

> Schick Consulting and Pacific Energy Associates. *Market Research Report: Commercial Buildings Initiative, Target Market Priorities.* Prepared for the Northwest Energy Efficiency Alliance. September, 2002.
>
> Reed, J. H., et al. *Decision-making in the Commercial Office Buildings Market: Targeting Key Players in the Office Submarket*. International Energy Program Evaluation Conference. Chicago, IL. 2007.
>
> Reed, J. and Turnball, P. *The Commercial Building Market Structure: An Act with Five Players*. ACEEE Summer Study on Energy Efficiency in Buildings. Pacific Grove, CA. 2008.

The results of these studies will be presented to detail the diverse market players, assorted business models, and various leverage points. This review will also illustrate that the commonly held belief in the *split-incentives* barrier is perhaps not truly present in many cases. As such, a fresh perspective on the target players in this market may benefit SCE energy efficiency programs targeting large offices by redirecting focus on other potential barriers. This document summarizes the authors' proposed recommendations for developing an effective marketing and outreach strategy for SCE's energy efficiency programs that target the large commercial office sector.

The major findings of the three studies reviewed are important in understanding how decisions are made with respect to capital improvement projects that improve energy efficiency in large commercial office buildings. This review organizes the findings from these studies into three sections:

[15] The term nonresidential, though used by SCE, is not the term found in the studies reviewed. The studies reviewed utilize the term "commercial." Thus, this report uses the two words interchangeably. However please note that, in this report, we are not referring to industrial customers or customers in commercial settings outside of large office building space.

- *Market Structure* – Section 4.2 discusses the market structure of the large commercial office building sector, including information on energy use, ownership, and the key market players and decision-makers. These studies highlight that a wide variety of players/organizations are involved in making decisions related to energy efficiency in large nonresidential office buildings. The studies reviewed describe these players as well as their business models and roles and responsibilities.
- *Strategies for Approaching Decision-Makers* – Section 4.3 summarizes strategies for approaching decision makers in this market with energy efficiency program opportunities, based upon differences in decision-making structures among the key market players.
- *Discussion of the Split-Incentive Issue* – As will be shown, neither Schick nor Reed imply the existence of a market barrier related to *split incentives* between owners and tenants. Schick does not directly address the issue but does overtly state several benefits for owners implying that both tenants and owners receive benefits in some cases. Similarly, Reed suggests that *split incentives* are not an issue to be concerned with and offers his explanation for this misunderstanding. Schick does however highlight the existence of a similar barrier not labeled specifically as a *split-incentive* barrier associated with triple net rent (NNN) provisions.

4.2. Large Commercial Market Structure

The three studies provide a great deal of information on ownership trends and emphasize key market players in the large commercial office sector. All three reports mention and classify these players, sometimes referring to them as types of decision-making organizations, types of firms or ownership categories. Understanding the market is contingent upon developing an understanding the types of individuals and organizations that own large office floor space, how many and which buildings are owned by these players, and who makes the key decisions about portfolios of buildings.

Commercial Property Ownership Categories

Table 4-1 illustrates Schick's ownership categories for commercial buildings in the Northwest. Schick identifies individual players such as real estate owners, asset managers, property managers, contractors, real estate brokers, and tenants/occupants but also divides them by ownership category as shown in Table 4-1 below. Although this table shows Schick's categories for buildings in the Northwest, this classification could very well apply to any region or service territory, including Southern California.[16] The following categories of ownership for large commercial properties are defined below.

Privately owned and leased real estate – These real estate owners own a number of properties and may be anything from a single individual to large regionally or nationally based corporations. They may be "vertically integrated" and handle everything in-house, or non-integrated, meaning that they contract out many responsibilities.

[16] Detailed descriptions of each of these ownership categories are found in Appendix A of the Schick paper. Appendix A depicts the description, size, specific actors, business practices, market barriers, potential opportunities, outstanding questions, and ratings for each of Schick's categories.

Institutionally owned/advisor managed real estate – This category includes pension funds, insurance companies and foreign investors. This group is "partially integrated," meaning they contract out some activities – such as day-to-day business operations at specific properties – to firms such as property management companies.

Real estate investment trusts (REITs) – REITs typically manage income-producing real estate. These organizations are breaking the private capital monopoly by providing small investors with a public market vehicle for investing in large, profitable real estate. Moreover, these organizations are by and large "integrated," in that they own and manage their holdings, employ property managers, provide or contract for O&M services and intend to capitalize on their economies of scale. Schick has developed a rating system for these ownership categories and rates REITs as having the most market leverage of all the ownership categories.

Privately owned and occupied real estate – This group represents a small percentage of the overall commercial real estate, especially when separating out small business. In the Northwest, companies like Nike and Microsoft own large office buildings in this category. This group is "partially integrated" according to Schick, in that some activities are done in-house, but especially the larger corporations contract out many activities to property management firms.

The table suggests that owner-occupied buildings make up 20% of this market, largely found in the Seattle and Portland metropolitan areas. The majority of owner-occupied buildings are small businesses and that large office buildings are found in all four ownership categories shown in the table. The table also details how the roles and responsibilities for each ownership type's business model are at least partially integrated. In other words, many roles and responsibilities are involved in making business decisions. Even though this information is specific to the Pacific Northwest region, it does provide some context into the commercial real estate market, in general.

Table 4-1: Ownership of Commercial Real Estate in the Pacific Northwest

OWNERSHIP CATEGORY	MARKET PERCENTAGE	OWNERSHIP DETAIL	REAL ESTATE HOLDINGS	BUSINESS MODEL
PRIVATELY OWNED AND LEASED	25%	National Firms Regional Co.s Individual Owners	Office Retail Industrial	Partially Integrated
INSTITUTIONALLY OWNED - ADVISORS	30%	Pension Funds Insurance Co.s Foreign Investors	Office Retail Industrial	Partially Integrated
REAL ESTATE INVESTMENT TRUSTS	25%	National Regional	Office Industrial Retail Apartments	Integrated
OWNER-OCCUPIED	20%	Government Corporations Large Retailers Small Business	Large Office Large Retail Small Buildings	Partially Integrated

Source: Schick 2002, developed from information from the Urban Land Institute and the National Association of Real Estate Investment Trusts.

Types of Firms Involved in the Commercial Real Estate Market

Reed groups the players in a similar but distinct fashion into five categories listed below and shown in Table 4-2 below. The section following Table 4-2 will discuss the potential strategies for addressing this collection of organizations and market players.

There is some overlap with Schick's groups but they are not exactly the same. Reed includes engineering service/construction firms, which Schick did not specifically mention. Moreover, Reed's categories are not necessarily focused on ownership, but rather are focused on "player types." These five groups, which Reed refers to as "types of firms" include the following:

- Firms that are sole owners and manage their own buildings,
- Owner/manager investor organizations (such as Real Estate Investment Trusts – REITs),
- Fee-based property management firms,
- Large institutional investors and pension funds, and
- Engineering service/construction firms.

Table 4-2, taken directly from the end of Reed's 2008 ACEEE paper, details these groups by describing their business models, typical manner of making decisions, relationship to utilities (e.g., who the utility contact is for each player and whether their name is in the utility's records), potential leverage points, individuals to whom marketing efforts are targeted, goals for a strategy to work with these players, and potential marketing messages. The section following Table 4-2 will discuss the potential strategies for addressing this collection of organizations and market players, as actually discussed in Reed's text.

Owner-occupied Office Space

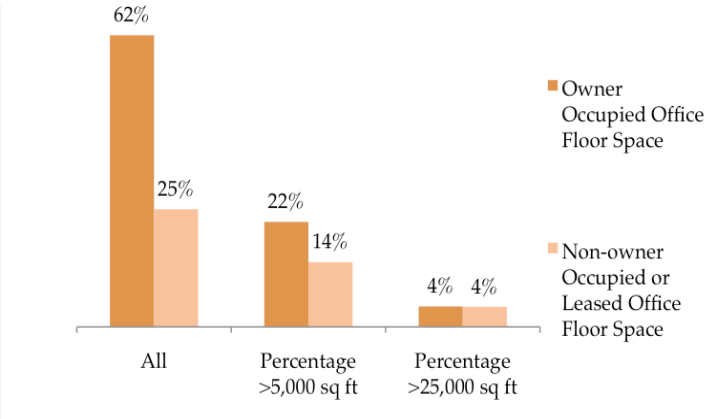
Figure 4-1 below summarizes the distribution of office building space greater than 5,000 sqft. by ownership type, *nationwide*. As shown, Reed estimates that 62% of commercial buildings are owner occupied and 25% are non-owner occupied, nationally. The remaining 13% are government owned buildings. Reed estimates that just over 22% of all commercial buildings are owner occupied *and* have a total area of greater than 5,000 square feet.[17] A total of 14% of all commercial buildings are non-owner occupied *and* have a total area of greater than 5,000 square feet as shown in the center column.[18]

Even larger buildings — those greater than 25,000 sqft— are split between being owner-occupied and non-owner occupied. The largest buildings are mostly leased, which follows this trend of bigger buildings being leased more often than smaller buildings. Understanding of this breakdown can help SCE become generally aware of whether buildings are leased or owner-occupied based on size. This awareness, in turn, may benefit the SCE marketing strategy for this sector.

[17] This information was drawn from the 2007 Reed report, which states 36% of owner-occupied buildings nationwide are buildings greater than 5,000 square feet.

[18] Calculated from information found in the Reed paper from 2007, which originally stemmed from a 2004 study Reed conducted for the DOE See *Who Plays, Who Decides: the Structure and Operation of the Commercial Building Market.* Reed/Innovologie. DOE 2004. See Appendix A of this report for details.

Figure 4-1: Owner-Occupied v. Leased/Non-Owner Occupied Office Space and Relative Percentage of Buildings with Area > 5000 sq ft.



Source: Created from data in Reed 2007

The 2007 Reed study also refers to the older DOE study to discuss the number of firms that own office-leased floor space. These findings illustrate a *concentration of ownership* in this market segment that presents an opportunity for energy efficiency program targeted marketing and outreach strategies. The paper states that 25 firms in the U.S. owned 17% to 18% of all office-leased space as of 1999. Furthermore, in the 2001 to 2002 timeframe, just 25 large companies developed approximately 80% of the new commercial office space. Finally, Reed explains that these primary owners tend to be located in central cities with large metropolitan areas.

Table 4-2: Characteristics and Strategies for Major Players in the Commercial Building Market

Type of Firm	Characteristics		Relationship to Utility		Strategy			
	Business model	**Decision-making**	**Name on utility record**	**Interaction**	**Leverage points**	**Target**	**Goals**	**Message**
Firms that own and manage buildings (full ownership)	• Buy and hold • Make money on lease and appreciation	• Decisions at the portfolio level • Recommendations at the building level are screened as they rise through the hierarchy	Yes	Corporate or account representative responsible for the whole account or multiple account representatives if if smaller or geographically spread firm	• They tend to hold property long-term • Energy plan is needed • May be willing to invest in projects with longer paybacks	• Owner • CEO • Senior executives at national / regional level • Financial analysts • Vice president or regional vice president for engineering	• Portfolio energy plan • Individual building plans • Building or end use monitoring and/or control	• Improved performance of portfolio • Quality building / better buildings • Reduced costs • Improved occupant comfort • Environmental impacts
Owner/manager organizations REITS (with co-investors)	Different goal for each building - buy and sell or buy and hold	Decisions are at building level depending on objective for buying or holding property	Yes or no	Corporate or multiple account representatives	• Buildings unlikely to be "flipped" within 3-4 years • Recently "flipped" buildings • Upgrades included in the building financing • Buildings that are leaving the portfolio	• Senior level trust managers • Senior property managers • Chief building engineers • Buildings new to portfolio • Buildings that just left a portfolio	• Individual building energy plans • Capital plans • Portfolio plans • Building level monitoring • Including efficiency at purchase • Track buildings leaving the portfolio	• The importance of energy efficiency to asset value and cost reduction • Green image and carbon reduction • Availability of analysis money
Fee-based property management firms	• Deliver high value services • Increase services • Provide high value services • Produce high client satisfaction	• Owners are the ultimate decisions-makers • Property managers have varying degrees of control	More likely no than yes	• Account reps work with staff on a building by building basis • Utility may not be aware of all buildings managed by company	• Build positive relationships by increasing asset value of building or reducing the cost of services • Opportunity to sell a new high value service to clients	• Owners • Senior high-level managers (asset manager, property managers) • Director of engineering • Chief engineers	• Create attractive product to be offered by fee- based managers • Aggregate properties • Get owners to ask fee-based managers to reduce energy costs • See fee-based operators as having multiple owners with multiple buildings • Provide customized building and portfolio energy plans	• Energy efficiency is a value added service • Service is a way to build positive client relationship • Reduced operating costs • Improved occupant comfort • Services to reduce tenant consumption • Carbon reduction • Availability of analysis money

Table 4-3: Characteristics and Strategies for Major Players in the Commercial Building Market (Cont.)

Type of Firm	Characteristics		Relationship to Utility		Strategy			
	Business model	Decision-making	Name on utility record	Interaction	Leverage points	Target	Goals	Message
Large investment firms, pension funds, and organizations that invest in buildings or have partial ownership in buildings but do not manage buildings	Invest in property to achieve high and stable long term gains	• Investment managers provide policy and guidance • Review and ratify decisions • May cede a high level of control to trust manager at property firm • Trust manager at property firm sets general policy and makes decisions about buy, sell, hold	No	No linkage between utility and firm	• There is external pressure on some investment managers to increase the energy efficiency of their portfolio • Executive contacts with policy makers could influence greater attention to efficiency	• Institutional investment organizations • Investment managers • Property managers	• Get institutional investors to develop EE polices • Target investment managers with tailored EE information • Provide information to property managers • Target property managers for efficiency	• Environmental value of efficiency • Relation of energy and asset value • Information on available resources • Availability of analysis money • Potential for energy efficiency
Engineering service/construction firms that provide services to large numbers of buildings	• Deliver high value services • Provide more services • Provide new high value services • Produce high client satisfaction	• Prepare budget and capital plans • Can influence decisions	No	Chief engineers interact with account reps usually dealing with service problems	• They are looking for new high-value services • They are in the position to provide knowledge and information to engineers • Operating engineers are very competitive about building operations • Benchmarking can provide a comparison tool • Building and end-use monitoring provide opportunities for feedback	• High-level decision makers at service companies • Chief engineers assigned to specific property companies	• Work with service companies to provide information and education to engineers • Engage engineers and service companies with energy benchmarking • Assist firms to develop retro-commissioning or other energy related services as an offering to companies for their clients • Promote monitoring	• Reduce operating costs through energy efficiency • Opportunity for value added services • Play on the competitive nature with benchmarks and the goal of the most energy efficient building

4.3. Strategies for Approaching Decision-makers

This section discusses the differences among the market players in terms of decision-making as presented in the reviewed studies. It also provides details on strategies for addressing the different players involved and a brief discussion of the *split-incentives* issue as presented in the studies. The differences in decision-making structures and strategies outlined may provide SCE with a useful framework for crafting and/or enhancing current marketing and program design approaches.

Key Considerations

Schick implies that there is an identifiable set of market players typically involved in business decisions that affect large commercial office real estate. He also mentions that a similar message can be used to approach many of these types of players in terms of energy efficiency capital investments. Therefore, there is merit in combining the real estate market segments from a market transformation perspective. Moreover, directing program messages towards players with greater responsibility are likely to be more effective. To this regard, Schick highlights the following considerations for developing a program strategy to identify key decision makers in this sector:

- Whether property owners use an integrated or a non-integrated business model (this determines who to approach);
- Whether the property is leased or owner-occupied (this determines the message); and
- Whether the properties are large or small (this determines the concentration/involvement of other market actors).

Most notably, Schick states that there is "a trend towards integrating the roles and responsibilities of the key real estate market players as companies look to provide full service while benefiting from economies of scale." Each of the market players is at least partially integrated in this sense, according to Schick's view. The paper argues for approaching more *integrated* real estate owners (e.g., REITs, some privately-held regional real estate companies, and large owner-occupied properties) directly and approaching more *non-integrated* real estate owners indirectly. For the latter, program marketing should focus its efforts on property management companies because they act as the owner's agent.

From the property management company perspective, Schick notes that bringing the value proposition [positive impacts on net operating income (NOI), raising or maintaining funds from operations (FFO)] to the owner's attention as an additional service offering strengthens their business relationship with the property owner and may serve as a source of income or fees, and may even provide a competitive advantage in obtaining new business.

Energy efficiency program strategies based on decision-making characteristics are discussed to a great extent in the Reed study. Reed makes some overall statements about how important it is for energy efficiency program planning to understand these decision-making differences. For example, it is individuals at higher levels in commercial property firms that usually make decisions about investments including energy efficiency investments as opposed to making decisions about specific measures. It is these comprehensive investment-type decisions that have a large impact. Thus, he reasons, there is a need to distinguish between decisions about investments and those about measures.

However, Reed notes that it can difficult to identify the ownership structure for each owner-type as well as the key individuals who make investment decisions. To address this difficulty, Reed presents his understanding of how decisions are made by each of the major market organizations. The strategies are outlined in Table 4-2 and described in more detail in a variety of sections divided by market player type. He labels each player as a different "type of firm." For this reason, the review of Reed's findings will be summarized using this categorization by Reed's types of firms.

Sole Ownership

Reed lists eight key criteria considered by sole owners in their decision-making process:

1. Payback or return on investment (ROI)
2. How long the firm expects to hold the building
3. The structure of the leases for the buildings
4. The urgency of the improvement
5. The equity of the building
6. The potential for change in the value of the building
7. The potential for selling the building
8. The need for liquidity within the portfolio

Sole owners make capital decisions in relation to all holdings rather than the building level. Interviews with some of the players in this category indicated that, in fact, they do not have energy-related capital budgets for specific buildings. Rather, requests are often evaluated as to what will work best within the overall portfolio.

Reed offers a five-point strategy for addressing this group:

1. Target key high-level decision makers
2. Provide key messages: improved performance of the portfolio, better buildings, reduced costs, improved comfort, environmental impacts
3. Provide assistance to create and support a long-term energy plan and implement it
4. Provide a program tailored to the firm that reflects the firm's values
5. CEO-to-CEO communication to gain the attention of CEOs

Owner/Manager Investor Owned Organizations (REITs)

For this group, depending on arrangements with investor owned organizations, capital requests may go back to the owner or ownership group. Upgrades can be included in the building's financing and energy efficiency projects could potentially be financed as part of a purchase. For this to happen, the costs and potential return of such projects need to be known.

Reed offers a "top-down, bottom-up" strategy for addressing these types of organizations with the following two primary components:

1. Top managers provide policy guidance and support, and
2. Energy efficiency needs to be on the agenda of the engineering staff and needs to be implemented through the existing budget process.

Additional components include: 1) identifying buildings that are new to the portfolio and/or likely to be held and targeting them, 2) developing tactics that can finance energy efficiency as part of acquisitions, and 3) identifying buildings that are likely to be sold and conducting follow-up with new owners.

Fee-based Property Management Firms

Fee-based property management firms provide an array of services for building owners ranging from asset management, financial management, tenant relations, facilities management, construction management, etc. These firms may manage a single building or a whole portfolio of buildings for individuals, small investor groups, corporations, or large investment firms.

Reed reported several important findings from interviews with fee-based managers. First, fee-based property management firms seem willing to work with their clients and the utility if there is something new rather than a repeat of what has been previously done. Second, they report there is an interest on the part of owners in sustainable buildings and LEED certification. Third, these firms report there is substantial discussion taking place about global warming. As such, owners are interested in positioning themselves to minimize economic consequences in terms of loss or reduced increases in equity and increased costs of operations. Additionally, some fee-based managers are also interested in modifying tenant energy behaviors through communication and appealing to a general spirit of community good.

The basic strategy for marketing energy efficiency improvements to fee-based property managers consists of two components:

1. Identify owners and get them to ask their property management firms to assess the efficiency of their properties, develop energy plans, and provide performance data; and
2. Work with high-level managers in the fee-based firm (e.g. a manager of asset services, director of engineering, or high level property managers) to identify and provide the necessary services.

Investment Funds with Large Portfolios of Commercial Building Properties

Investors in investment funds with large portfolios of properties provide a substantial amount of the capital that is put towards large commercial office buildings.[19] Reed makes several observations about these funds. First, the business model is to invest in property to achieve high and stable long-term gains for these firms. Information about holdings can be found in public filings for public investment funds. These funds usually have a small number of investment managers who deal with real estate; investment

[19] Two examples cited are TIAA-CREF and CalPERS. CalPERS investment portfolio has $223.5 billion in assets, $16.8 billion of which is real estate investments, according to the study.

managers are under increasing pressure to take up energy efficiency and carbon reduction activities. Overall, institutional investors are in a position to influence property managers and thereby increase the efficiency of buildings. (CalPERS has done so in PG&E's territory.)

Reed suggests a four-pronged strategy to address these types of investors:

1. Get institutional investors to develop policies that include the monitoring of the energy and environmental performance of building operations;
2. Target investment managers with information on energy efficiency, the subsequent returns, non-energy benefits, and utility programs;
3. Provide guidance and assistance to investment managers as to the tools that are needed and how property managers can measure energy and environmental performance and value of efficiency investments; and
4. Provide the tools and training to property managers.

Firms That Supply Engineering and Maintenance Services to Large Building Portfolios

Reed also observes that large property firms are increasingly outsourcing building engineering and maintenance services to third parties. In fact, most of the large commercial property firms make use of engineering service firms. Existing relationships with utilities are typically between chief engineers who interact with account representatives to deal with service-related issues.

Strategies to work with these types of groups include the following:

1. Work through the service companies to provide information and education for engineers;
2. Work through service companies to organize collaborative groups of engineers from firms with one or two buildings (on geographic basis);
3. Engage owners (particularly those that are pushing the engineering service companies on performance) to benchmark building energy performance using the EPA's Portfolio Manager[20] and provide assistance in learning how to use it and tracking/interpreting results; and
4. Work with service firms to promote and perhaps develop retro-commissioning services as an offering.

4.4. The Split-incentives Barrier to Energy Efficiency

The *split-incentives* market barrier has not yet been fully addressed in the research reviewed. However, both Reed and Schick make statements relevant to this issue. Understanding of this issue may be very useful for SCE strategies for approaching the decision-makers making key investment choices, in particular in how to frame the approach towards the various ownership types in terms of benefits accrued.

[20] The EPA's Portfolio Manager can be found at http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager.

Reed's 2008 paper for ACEEE's Summer Study on Energy Efficiency in Buildings specifically addresses the *split-incentive*s issue. An important fact not well understood, Reed mentions, is that the owner often pays the energy bill (though he does not specify how often) and that tenant energy costs are fixed in proportion to the amount of space leased relative to the total lease space.[21] In fact, he explains, the amount the owner pays for energy is generally fixed in the lease and known as the "expense stop." The tenants pay the marginal costs above this "expense stop." Reed does not specify how much, in terms of dollars or percentage the "expense stops" typically are.

Reed continues by stating that the owner benefits from energy efficiency to the extent that energy costs can be reduced below the expense stop because the amount of the lease is fixed. In a large building, there could be hundreds of leases, each with its own lease rate and energy expense stop. Thus, it is necessary to recognize all of the expense stops to assess benefits from energy efficiency. The issue is addressed only as a footnote and further research would likely help clarify the issue.[22]

Although Schick does not directly address the so-called *split-incentive* market barrier, there is evidence in the paper that he believes it does not always exist, given that he states several clear benefits of energy efficiency for owners. Given that most commercial real estate is leased, the *split-incentives* market barrier may be present with the triple net (NNN) rent provision found in most leases. According to Schick, NNN rent means the tenants agree to pay the owner's operating expenses, including energy costs, proportionate to the amount of space each tenant occupies. This may result in the owner not experiencing the benefits of energy efficiency. However, Schick argues that the issue can be addressed by restructuring lease arrangements, and as the paper suggests, with a service charge added or a rent increase negotiated to compensate the owner for energy efficiency related investments. There is a timing element to adjusting lease agreements that must be taken into account. Both tenants and owners will be reluctant to alter or change lease agreements before they naturally come up for renewal.

4.5. Summary and Recommendations for the Large Commercial Office Market

Regardless of the lease provision constraints mentioned above, Schick contends that real estate owners and their agents can take some practical steps to capture benefits requiring a business framework or business process. Schick outlines suggested steps, which are illustrated in Table 4-3.

[21] Reed notes that specialized areas such as data centers may be handled separately.

[22] The Better Bricks paper, *The High Performance Portfolio: Leasing and Energy Allocations,* included in the Appendix, discusses the various lease types as well as how to pursue energy efficiency under the different lease structures found in the commercial market. One statement that resonates from this study is the following: "If the expense-sharing dynamics of a lease are not well understood, the financial implications of improved energy performance may be overstated or understated – clouding decision-making." Upon additional research, SCE may find that the true barrier is not related to *split incentives*, but rather a lack of understanding. This paper has not yet been thoroughly reviewed.

Table 4-3: Strategies for Large Commercial Energy Efficiency Program Design

Business process could begin with an opportunity assessment considering technical, financial, and market oriented factors.
Business process must integrate with property owner or agent's existing business practices, impacting NOI, FFO, property management fee structures, or other financial performance indicators.
Support tools such as energy use benchmarking, financial analysis modeling, proto-type lease provisions or contract terms, and case study materials are critical. (U.S. EPA tools can be useful.)
The result is an energy plan impacting business operating and financial decision making related to O&M practices, tenant improvements, capital improvements, and other energy related business activities.
An effective Marketing Team strategy must work in partnership with existing real estate market actors to instigate change, and compliment existing utility energy efficiency initiatives.

Many additional general observations about the large commercial office market were provided in Reed's 2007 report. First, he highlights the substantial turnover in ownership, which he considers an additional market barrier to energy efficiency. Second, there seems to be widespread recognition that there is still more that can be done in terms of energy efficiency. In several instances Reed highlights analysis and benchmarking as keys to developing long-term energy management plans.

As discussed in Section 4.3, as a result of the way that leases are often structured for large commercial office buildings, the energy efficiency incentives are not split and may only partially accrue to the tenant (NNN rents being one potential exception). In fact, owners benefit from reducing net operating costs and increasing asset value. Reed argues that it is important to report potential changes in asset value when making energy efficiency improvement recommendations based on building analysis. Furthermore, it is important, Reed says, to make sure that potential tenants taking large amounts of lease space are aware of utility and public goods charge programs using leasing agents and owners. This requires working with owners to target efficiency upgrades in areas with inefficient lighting or other energy systems when leases are renewed or perhaps before, he explains.

Reed's 2008 ACEEE report highlights several overall findings in a section he refers to as *Implications for Program Design and Delivery*. EMI has characterized his overall approach by separating out two components: *Decision-Maker Identification and Focus* and *Building Portfolio Target,* each discussed below.

Decision-maker Identification and Focus

In many instances, Reed's papers hint at the importance of understanding and focusing on key, high-level decision-makers. He has drawn the following conclusions in this regard:

- A small group of fee-based property management firms are intimately engaged with leasing arrangements for most buildings; these arrangements establish owner/tenant/manager obligations regarding energy costs, build-out allowances and so on.
- Business interests, time frames, and constraints of the players are different.

- On-site staff can make few if any major decisions affecting efficiency unilaterally but the facilities engineer may have great influence with a senior property manager who may influence the owner.
- It's critically important to know and understand who the major players are in each category, their business drivers, their decision making hierarchies, and finally, what points of influence or leverage a utility and its program might actually have with each player type.
- Targeting management at high levels requires fewer people and takes advantage of top-down decision making.

Building Portfolio Approach

Reed contends that the "building by building" approach is no longer sufficient in addressing the large commercial office market. This belief is expressed in a number of conclusions he states including the following:

- It now rarely makes sense to think of individual buildings as customers. A portfolio perspective may be a better target to have in mind.
- There is substantial crossover of building portfolios. The decision for any given building may involve the intersection of multiple decision makers, each with its own portfolio of buildings and its own business model and value proposition.
- Large REITs control significant amounts of square footage of the commercial real estate market.
- Individual "owners/operators" routinely work with fee-based property managers and engineering service companies.
- A small number of large national engineering service companies run the chiller and building control systems in most large buildings.[23]
- In general, the decision makers do not have offices in the building, except by coincidence, and may well not be in the same city, state, or even country. Reed suggests working with each major player and views each as an opportunity to aggregate buildings.
- Most large buildings are typically part of much larger portfolio of buildings and these fleets represent a significant and much large opportunity to promote energy efficiency and carbon reduction.
- Convince decision makers in fleet organizations that it is important to develop an overall plan.
- Reed's example: in PG&E's territory, contacts with 50 to 100 firms can result in addressing thousands of buildings. One PG&E project titled "More than a Million" targets building portfolios or fleets in its approach.[24]

[23] For instance, the top two companies control roughly 60% of "big building" chiller systems in the San Francisco Bay Area.

[24] According to the ENERGY STAR website, in 2007 PG&E "integrated the use of EPA's energy performance rating in both its retro-commissioning program and the More than a Million Initiative as the first step in identifying energy-saving opportunities. PG&E assists qualifying buildings in receiving the ENERGY STAR label. The More than a Million initiative is a new program delivery approach targeted to customers with large "fleets" of buildings who are likely to identify at least one million watts of energy demand reduction across their facilities. PG&E's Service and Sales representatives and other energy efficiency service providers offer initial screening using the Portfolio Manager for demand side management offerings." See http://www.energystar.gov/index.cfm?c=pt_awards.2008_pacific2

Challenges

Reed concludes with a set of challenges to such an approach focusing on key decision makers and overall building portfolios. The decision-maker/portfolio approach:

- Requires interventions at higher levels in client organizations and interventions with decision makers from a distance.
- Requires utility reps with a different set of skills than those who interact with facilities engineers at a building level.
- Requires thinking beyond the utility boundaries.
- Requires identifying the key decision makers and firms that may not be customers of record.
- May require that higher levels in utility organizations become involved with larger customers.
- Requires thinking about how organizations whose operations are structured to deal with buildings and sites can be organized in a manner that addresses firms with activities that cut across geography and customers.

The suggestions and comments on challenges that Reed offers may provide a starting point for research aimed at building a more comprehensive understanding of and approach for addressing the large commercial office market in SCE's service territory.

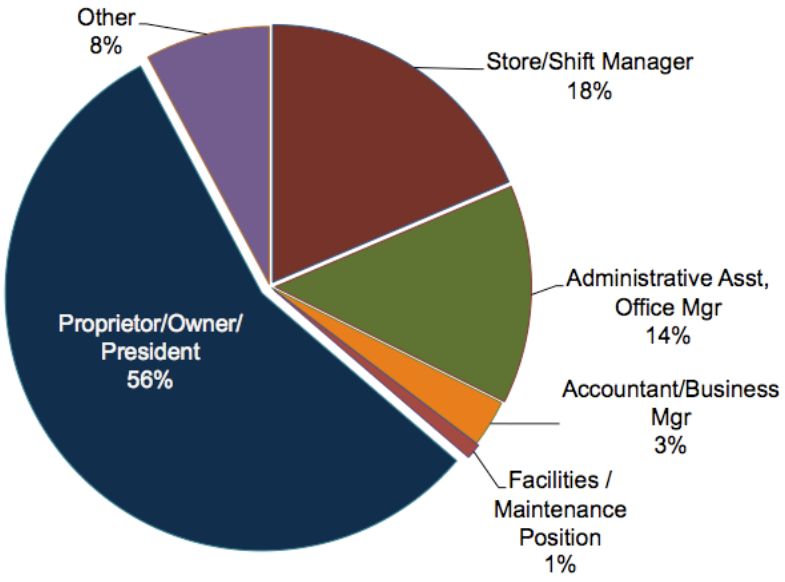
Appendix A. SURVEY RESPONDENT CHARACTERISTICS

A.1. Small Business Customer Survey Respondents

This section presents findings of the customer survey relating to select characteristics of small business customers. The characteristics detailed herein include job titles, business types, details on the time of year respondents are most likely to make improvements, and details on the best time of day to contact the respondents.

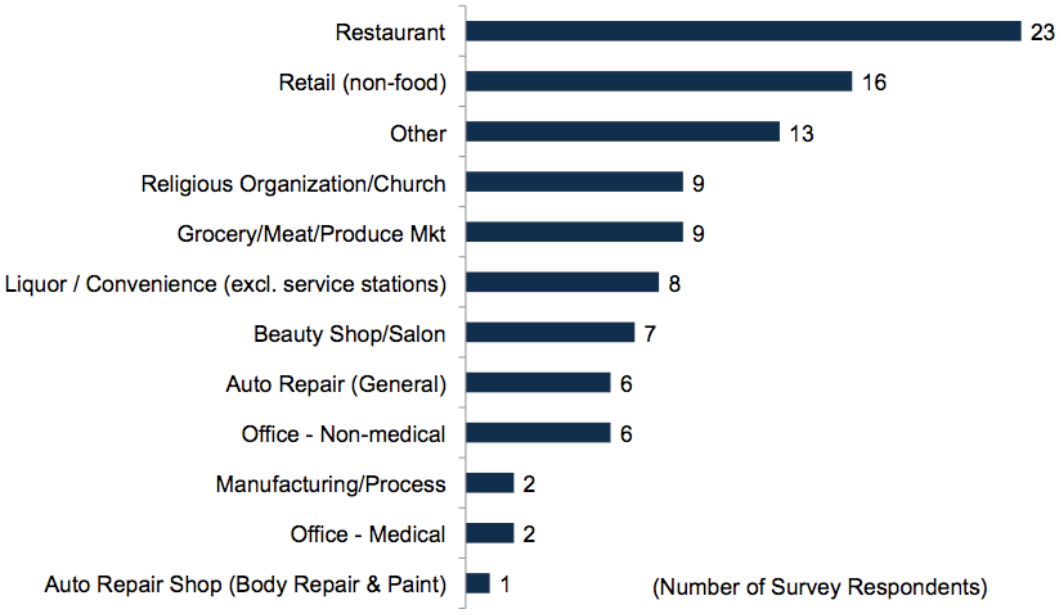
The individuals responding to the survey hold different job titles and responsibilities, as shown in Figure A-1. As the figure portrays, over half of the respondents were business owners. Another 17% of the respondents were store managers. Thus, most respondents hold leadership positions at their business.

Figure A-1: Job Titles of Survey Respondents



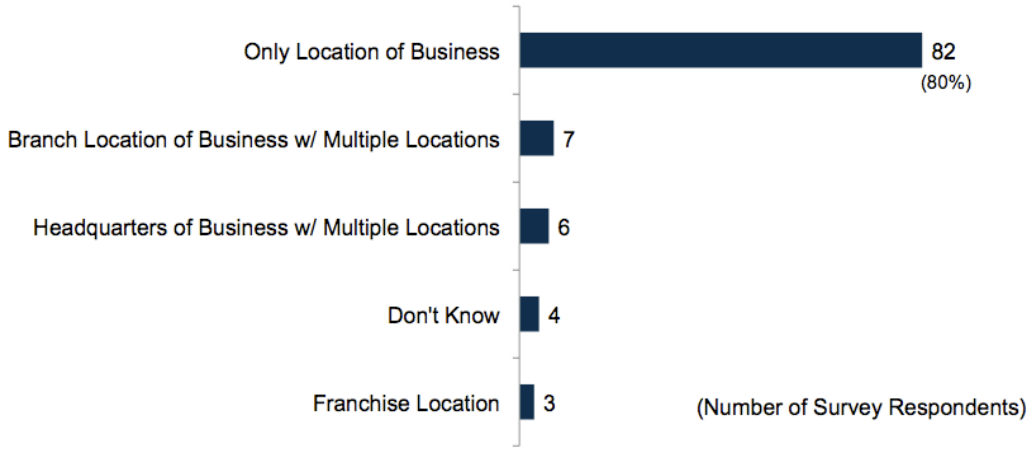
The survey results illustrate differences and similarities among the respondents' characteristics. Figure A-2 shows that the surveyed businesses were not split evenly among the five market segments defined in the CSS data. More than 20% represented restaurants. Likewise, when adding together the number of respondents from small groceries and meat/produce markets with liquor/convenience stores, this segment comprises nearly 20%. Another 16% were considered to be retail stores (excluding food sales).

Figure A-2: Distribution of Business Types (Self-reports)



As shown Figure A-3, the majority (80%) of respondents indicated their business location was the only location of the business. A few others indicated that their establishment was a branch of a larger organization, a headquarters location for an organization with multiple locations, or a franchise location. (Interestingly, four respondents did not know.)

Figure A-3: Number of Business Locations



To provide SCE with some insight into marketing and outreach timing strategies, the customer survey asked what time of year they were most likely to make improvement to their businesses space and the time of day they prefer to be contacted to learn about SCE's program. As shown in Table A-1, summer was most commonly mentioned as the time of year businesses were likely to undertake facility

improvement projects, winter was a bit less common. Almost an equal number of respondents indicated that projects are done on an "as-needed" basis.

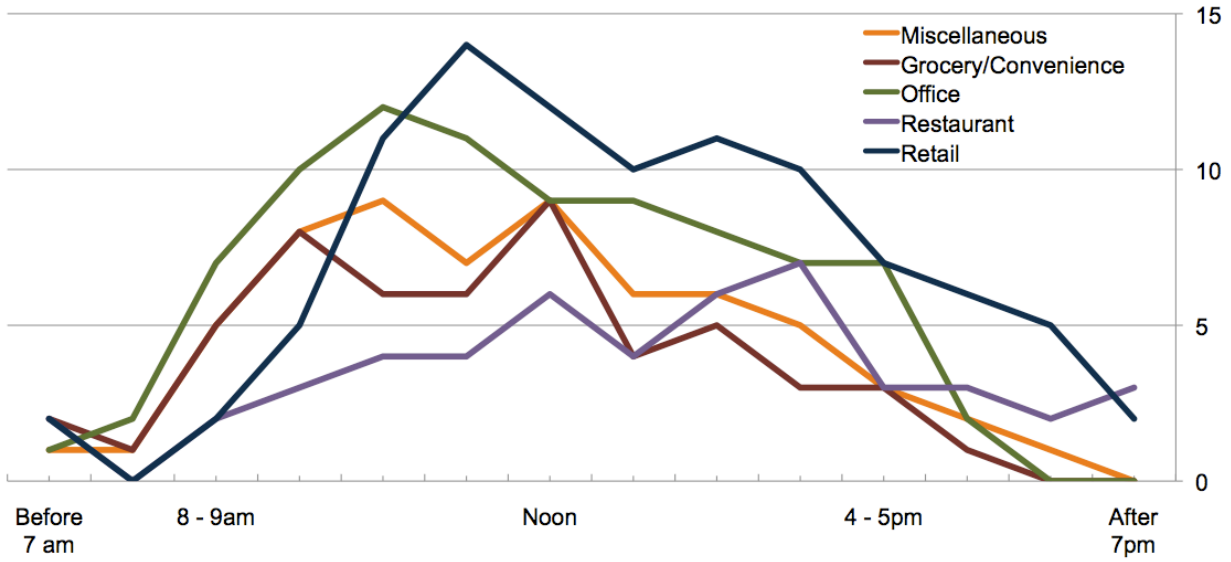
Table A-1: Time of Year for Improvements

"What time of year are you most likely to make improvements for your business?"	# of Mentions
Summer	23
Winter	16
Spring	5
Fall	5
As Needed	21
Depends on Money/Business	3
Anytime	5
None/Never	8
Other	15
Don't Know	7

Multiple responses accepted.

Figure A-4 presents the distribution of the time of day the respondents prefer to be contacted. As shown, the preferred time of day for making contact with small business customers varies a bit by Business Segment. For example, retail customers prefer to be contacted before noon, whereas, restaurants prefer to be contacted in the afternoon, after the lunch hour. Respondents representing the office segment indicated a stronger preference toward the morning contacts. Recognizing these preferences, SCE can focus direct customer outreach that is in alignment with their customers' needs and preferences.

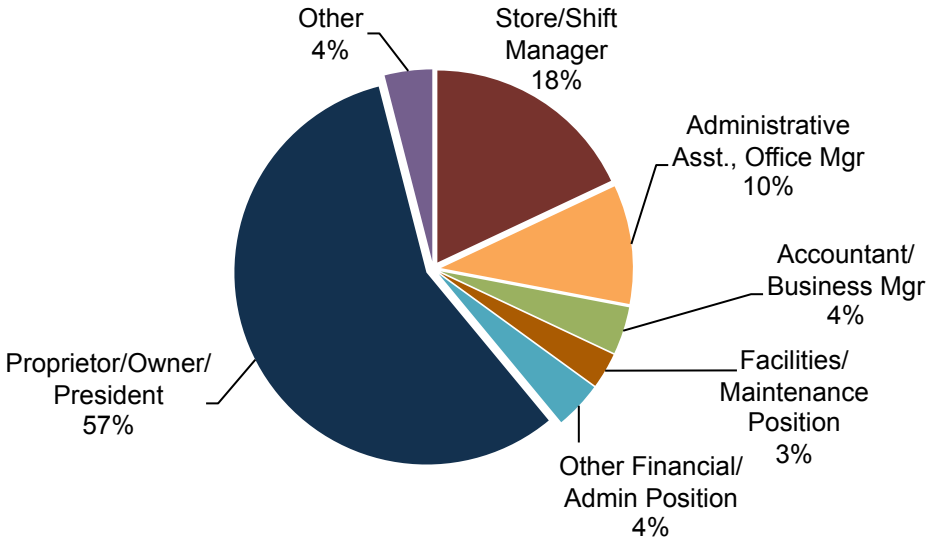
Figure A-4: Preferred Time of Day for Contact by Business Segment



A.2. Small Commercial Direct Install Survey Respondent Characteristics

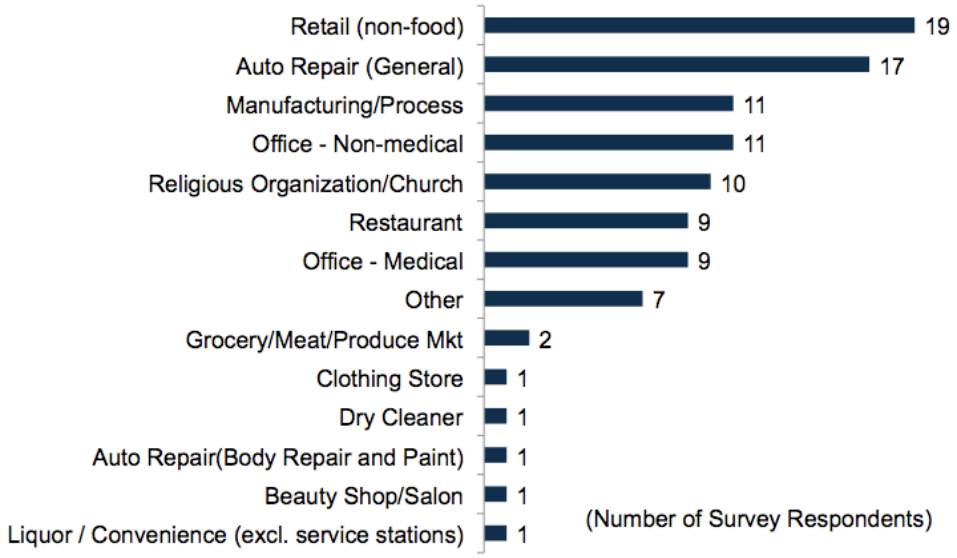
Figure A-5 illustrates a variety of occupations among the survey respondents. Over half (57%) of those responding to the survey were business owners and nearly over 30% managers.

Figure A-5: Job Titles/Responsibilities of Survey Respondents



The majority (83%) of the respondents indicated that their business was based at only one location. Respondents' business types were from a broad range of small businesses. Figure A-6 below, displays the frequencies of business types found among those surveyed. A total of 68% of the respondents indicated their business outlook to be "fair," "good," or "excellent." Just over one-third (36%) of the customers were from retail (excluding food sales) and automotive repair shops.

Figure A-6: Business Types - "What kind of business or organization are you?"



Appendix B. REFERENCES AND SUMMARIES OF SELECT STUDIES

B.1. References

Chamberlain, B., Lahr, G., and Nushwat, M. Energy Solutions, Association of Bay Area Governments and Pacific Gas and Electric. *Leading by Example: Streamlining EE in the Local Government Sector*. ACEEE 2008 Summer Study on Energy Efficiency in Buildings.

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Gandhi, N., Gray, P., O'Connor, D., Vagnini, R., Kiernan, K. and Baggett, S. *"On-Bill Financing of Small Business Energy-Efficiency: An Evolving Success Story"*. ACEEE Summer Study 2008.

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Nextant. *Evaluation, Measurement & Verification of the 2004-05 Business Energy Services Team (BEST) Program of the San Diego Regional Energy Office*. Final Report. Prepared for California Public Utilities Commission and the San Diego Regional Energy Office. August 2006.

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Quantum Consulting, Inc. *National Energy Efficiency Best Practices Study. Volume NR1 – Non-residential Lighting Best Practices Report.* December 2004.

Regional Economic Research. *SDG&E Small Business Customer Survey*. 1999.

Robert Mowris & Associates. *Evaluation, Measurement and Verification Report for the Emerging Communities Energy Efficiency Program #1396-04*. Final Report. Prepared for California Public Utilities Commission. August 2006.

Schick Consulting and Pacific Energy Associates, Inc. *Commercial Buildings Initiative, Target Market Priorities: Market Research Report*. Northwest Energy Efficiency Alliance. September 2002.

XENERGY, Inc. *1999 State-Level Small/Medium Nonresidential MA&E Study: Final Report*. Vol. 1 and 2. Prepared for Pacific Gas and Electric Company. December 2000.

B.2. Select Studies

This section lists several additional sources of information about the large commercial office market. It is intended to complement the three studies previously reviewed with particular information on programs, initiatives, strategies, and other information about this market. Table B-1 lists these studies along with a very brief description of each.

Table B-1: Summary of Relevant Large Commercial Office Market Studies

Source	URL	Author	Year	Brief Description
The High Performance Portfolio: Leasing and Energy Allocations (attached as Appendix B)	http://www.betterbricks.com/graphics/assets/documents/BB_WinTactics_LeaseTypes_final.pdf	Better Bricks	2007	Describes the various lease types for commercial tenants and how to pursue energy targets accordingly.
Commercial Buildings Energy Consumption Survey	http://www.eia.doe.gov/emeu/cbecs/	EIA	Update in progress	Provides overview of energy consumption in the commercial sector.
Who Plays, Who Decides: the Structure and Operation of the Commercial Building Market	http://innovologie.com/Who%20Plays.html	John Reed and Innovologie / U.S. DOE	2004	Provides an overview of the entire commercial building market including decision-making structures and key players.
Best Practice Guide	http://www.fypower.org/bpg/index.html?b=offices	Flex Your Power	Current	Best practice guide for energy efficiency in commercial buildings in general
BOMA Energy Performance Contracting Model	http://www.boma.org/resources/bepc/Pages/default.aspx	Building Owners and Management Association International (BOMA)/ Clinton Climate Initiative	Ongoing	Provides a model contract and other information on
ENERGY STAR for Commercial Buildings	http://www.energystar.gov/index.cfm?c=business.bus_index	U.S. EPA	Ongoing	Provides several tools for commercial buildings, including Portfolio Manager

EMI reviewed several evaluation studies for the small commercial customer research. These studies vary in scope, methodology, and sector focus. Table B-2 summarizes the programs and corresponding evaluation studies identified, the study sponsor, the markets targeted by the program, and the evaluation methods and sample size.

Table B-2 Summary of Relevant Small Business Market Studies

Program/ Eval Study	Study Sponsor	Program Target Market	Methods	Study Sample Size
Small Business Commercial Energy Efficiency Study: Restaurants and Green Grocers. Final Report	Ontario Power Authority	Restaurants & Green Grocers	20 comprehensive energy assessments focusing on education, incentives, energy consumption, and facilitation Examination of Market Barriers Participant survey examined energy use behaviors and knowledge of energy efficiency equipment	20 participants
Evaluation, Measurement, and Verification Report for the Small Nonresidential Energy Fitness Program	CPUC and PG&E	Hard-to-reach business customers	M&V approach based on IPMVP protocols – Options A & B Sampling methods based on CPUC Energy Efficiency Policy Manual to analyze the data and extrapolate mean savings estimates from the sample M&V approach: pre-process participant and non-participant surveys to evaluate participant satisfaction, and obtain suggestions to improve	68 participants 68 nonparticipants 20 non-contacted businesses
Evaluation of the SCE 2004-05 Small Business Energy Connection Program	CPUC and SCE	Small and very small business customers	Measurement and Verification – M&V of gross ex ante energy savings and gross ex ante demand reductions claimed by program through thorough review of participant records and program-tracking database Process Evaluation – interviews with program staff and phone surveys of participating and non-participating customers Measurement of customer satisfaction and program influence	601 participants 200 nonparticipants
Evaluation of the SDG&E 2004-05 Small Business Energy Efficiency Program (SBEE)	SDG&E	Small Business Energy Efficiency (SBEE) Program – very small (<20kW) hard-to-reach customers	Impact Evaluation: M&V of gross ex ante energy savings and demand reductions claimed by program through thorough review of participant records and program-tracking database Process Evaluation: Interviews with program staff and phone surveys of participating and non-participating customers Measurement of customer satisfaction and program influence	300 participants 100 nonparticipants

Appendix C. SURVEY INSTRUMENTS

Direct Install "Refuser" Survey

Small Business Customer Survey

Direct Install "Refuser" Survey

Survey Objectives: To learn primary reasons small businesses refuse participation in SCE's Direct Install program; to learn about current state and information sources small businesses utilize for information, etc.

Sample Frame: SCE commercial & industrial customers in the 0-99 kW demand use category who have been approached by Direct Install program representatives, but have refused participation.

Introduction & Identify Appropriate Respondent

[IF CALLING <CONTACT_PHONE>, USE THE FOLLOWING WORDING:]

Q1a

Hello, this is _____of Quantum Market Research, calling on behalf of Southern California Edison. May I please speak with <CONTACT>? [IF NEEDED: We are contacting small businesses in SCE's service area to help SCE improve the programs they offer to small businesses that help reduce their electricity bill. My understanding is that <CONTACT> is responsible for general decision-making for your business at <SERVICE_ADDRESS> - may I please speak with him/her?

1 Yes – CONTINUE TO Q2
2 No, this person is not available right now [Ask when available or leave message.] CALL BACK LATER
3 No such person/The person no longer works here [Probe for the individual responsible for reviewing and/or paying utility bills, and/or purchasing major equipment. IF STILL "NO SUCH PERSON," THANK & TERMINATE.]
4 There is no one here with information on that address/Wrong address [THANK & TERMINATE]
5 We are the property management company/lessor for that address [SKIP TO Q3a]
98 Refusal – THANK & TERMINATE

[IF CALLING <CUST_PHONE>, USE THE FOLLOWING WORDING:]

Q1b

Hello, this is _____of Quantum Market Research, calling on behalf of Southern California Edison. We are contacting small businesses in SCE's service area to help SCE improve the the programs they offer to small businesses to help reduce their electricity bill.. May I speak with the owner, manager, or someone else responsible for making general business decisions for your business at <SERVICE_ADDRESS>?

1 Yes – CONTINUE TO Q2
2 No, this person is not available right now [Ask when available or leave message.] CALL BACK LATER
3 No such person [Probe for the individual responsible for reviewing and/or paying utility bills, and/or purchasing major equipment. IF STILL "NO SUCH PERSON," THANK & TERMINATE.]
4 There is no one here with information on that address/Wrong address [THANK & TERMINATE]
5 We are the property management company/lessor for that address [SKIP TO Q3a]
98 Refusal – THANK & TERMINATE

Q2

Hello, this is _____ of Quantum Market Research, calling on behalf of the Southern California Edison. We are contacting small businesses in SCE's service area to help SCE improve the services they offer to small businesses like yours. We are interested in learning about learning more about your business decisions, particularly those that affect how much energy you use, such as the replacement of lighting fixtures and heating

and cooling equipment. We are offering you $25 in exchange for only 15 minutes of your time; your input is very valuable. Is this a good time for you or is there a better time I can call you back?

1 Yes - SKIP to C1 [PROCEED WITH SURVEY]
2 No – SCHEDULE CALLBACK
3 We are the property management company/lessor for that address [CONTINUE TO Q3]
98 Refusal – THANK & TERMINATE

Q3
Is your company responsible for contracting for heating, cooling, and lighting equipment replacement and repair services for the property at <SERVICE_ADDRESS> and for other properties you manage? Or is someone else, such as the owner or tenant responsible for maintenance and repairs?

1 Yes, we are responsible for contracting for heating, cooling, and lighting equipment replacement and repair services
2 No, the owner, tenant, or someone else is responsible for contracting for heating, cooling, and lighting equipment replacement and repair services.
98 Refusal
99 Don't Know

Q4
Is your company responsible for paying the electricity bill for this and other properties you manage?

1 Yes, we pay the electricity bill
2 No, the tenant, or someone else is responsible for paying the electricity bill.
98 Refusal
99 Don't Know

[IF BOTH Q3 AND Q4 = NO or refusal, or DK – THANK & TERMINATE]

Q5
SCE is interested in learning more about how to help small businesses reduce their electricity use, including tenants of the properties your company manages, particularly by providing financial incentives to help pay for more energy efficient lighting, heating and cooling equipment. Would you be willing to participate in a short phone survey at a later date?

1 Yes
2 No – THANK & TERMINATE

Q6
Great. Let me just confirm your company name, your name and phone number.

Company Name: _____
Contact Name: _____
Contact Phone (incl. area code): _____

Q6
What time of day is generally best for you?

Record response: _____ [THANK & TERMINATE]

Customer Background

C1
First, what is your job title?

[Do not read from list.]
1 Store manager
2 Shift manager
3 Administrative assistant/Secretary/Office manager
4 Accountant/Business manager
5 Other facilities management/Maintenance position
6 Other financial/Administrative position
7 Proprietor/Owner/President
8 Other (Specify)
98 Refused

Now I'd like to ask you a few questions about your business.

C2
What kind of business or organization is <COMPANY_NAME> ?

[Do not read. If necessary, probe categories.]
1 Office - Non-medical
2 Office – Medical/Dental
3 Restaurant
4 Grocery Store/Meat or Produce Market
5 Liquor Store / Convenience Store (excluding service stations)
6 Manufacturing/Process
7 Beauty Shop/Salon
8 Religious Organization/Church
9 Automotive Repair Shop (General Repair)
10 Automotive Repair Shop (Top & Body Repair and Paint)
11 Dry Cleaner
12 Coin Operated Laundry
13 Video Rental
14 Florist
15 Clothing Store
16 Other (Specify _____)
98 Refused
99 Don't Know

C3
Is this location at <SERVICE_ADDRESS> the only location of <COMPANY NAME> , or are there other locations?.... [Provide <SA_CITY> and/or <SA_DESCRIPTION> if necessary]

[READ LIST OF RESPONSES]
1 This is the only location [SKIP to C4]
2 There are other locations
98 Refused

99 Don't Know

C3a
How many other locations are there in Southern California?
Number _____
98 Refused
99 Don't Know

C3b
How many other locations are there elsewhere, outside of Southern California?
Number _____
98 Refused
99 Don't Know

C4
What is the primary language spoken at this location?
1 English
2 Spanish
3 Chinese
4 Other (SPECIFY)_____
98 Refused
99 Don't Know

C5
At this location, does <COMPANY_NAME> occupy a single, stand-alone building, or do you occupy a portion of a building that includes other businesses or residences?
1 Occupy whole building
2 Occupy portion of building
98 Refused
99 Don't Know

C6a
Does your business/organization own or lease this space?
1 Own this space – SKIP to C9
2 Lease this space
3 Own a portion and lease the remainder – SKIP to C9
98 Refused
99 Don't Know

C6b
[If lease (C6a = 2)]:
Does your business/organization pay its own electric bill directly to SCE, or is electricity provided in your lease arrangement?

1 Pay own electric bill
2 Part of the lease arrangement
98 Refused
99 Don't Know

C7a
[If C6a = 2]:

Does your lease allow you to make tenant improvements (such as replacing lighting fixtures, replace carpet, replace equipment, construct walls, paint) at this location?

1 Yes
2 No
98 Refused
99 Don't Know

C7b
[If yes]:
If you were to make any such changes, and you discontinued your lease, would you have to change the space back to how it was originally, or could you leave the changes?

1 Yes – would need to change back
2 No – could leave changes
98 Refused
99 Don't Know

Businesses or organizations such as yours often hire contractors to replace equipment or make repairs. SCE is interested in learning who makes decisions and hires contractors to replace or repair light fixtures or heating and cooling equipment – whether it's you, the building owner, a property management company - or maybe in some cases instead of hiring a contractor, you (or someone else at the company) do the work yourself. Next I'm going to list different types of tasks, and I'd like you to tell me who hires contractors for each one - if it's you, the building owner, a property management company, or if you do the work yourself instead of hiring a contractor.

C8
[If C6a = 2]:
Who typically hires contractors to:

C8a Conduct day-to-day building operations and maintenance (inside the building)?

1 We/my company hires the contractors
2 Building Owner
3 Property Management Company
4 We/my company does this work ourselves
98 Refused
99 Don't Know

C8b Regularly service heating, cooling, plumbing, and/or electrical equipment?

1 We/my company hires the contractors
2 Building Owner
3 Property Management Company
4 We/my company does this work ourselves
98 Refused
99 Don't Know

C8c Repair heating, cooling, plumbing, and/or electrical equipment?

1 We/my company hires the contractors
2 Building Owner
3 Property Management Company
4 We/my company does this work ourselves
98 Refused
99 Don't Know

C8d Install heating, cooling, plumbing, and/or electrical equipment?

1 We/my company hires the contractors
2 Building Owner
3 Property Management Company
4 We/my company does this work ourselves
98 Refused
99 Don't Know

C8e Remodel the space that your business occupies?
1 We/my company hires the contractors
2 Building Owner
3 Property Management Company
4 We/my company does this work ourselves
98 Refused
99 Don't Know

C9
For some companies/organizations, there might be a certain time of year that they are more likely to make improvements to their business. There might be times when your business is slower or you have a greater budget to allow for improvements. What time of year are you most likely to make improvements for your business?
&Response
98 Refused
99 Don't Know

C10
If someone were to call or stop by your business/organization, what time of day would be best for you? [DO NOT READ OPTIONS. CODE MULTIPLE SELECTIONS IF NECESSARY TO CAPTURE RESPONSE]
1 before 7 am
2 7 to 8 am
3 8 to 9 am
4 9 to 10 am
5 10 to 11 am
6 11 am to 12 noon
7 12 noon to 1 pm
8 1 to 2 pm
9 2 to 3 pm
10 3 to 4 pm
11 4 to 5 pm
12 5 to 6 pm
13 6 to 7 pm
14 7 to 8 pm
15 8 to 9 pm
16 after 9 pm
17 Any Time
18 Never
19 Other (SPECIFY_____)
98 Refused
99 Don't Know

C11a
Do you have a computer with access to email or Internet at your business/organization?

1 Yes
2 No – SKIP to D1
98 Refused – SKIP to D1
99 Don't Know – SKIP to D1

C11b
About how many days per week do you check email or access the Internet at your business/organization? [READ RESPONSES 1 THROUGH 5 BELOW]

1 1 or 2 days per week
2 3 or 4 days per week
3 5 or more days per week
4 Rarely (less than once per week)
5 Never
98 Refused – SKIP to D1
99 Don't Know – SKIP to D1

Decision Influences

D1
How would you characterize your company's business outlook right now? Would you say it is … [READ RESPONSES]

5 Excellent
4 Good
3 Fair
2 So-so
1 Poor
98 Refused
99 Don't know

D2
What is your average monthly electricity bill at this location?

$ Monthly bill amount
98 Refused
99 Don't know

D3
On a scale of 1 to 5, with 1 being not at all, and 5 being very much, how aware are you of ways you can reduce energy use and save money on your organization's electricity bill?

#Rating from 1 to 5
98 Refused
99 Don't know

D4a
Has your business/organization ever taken SCE's online Business Energy Survey? [IF NEEDED: This survey involves answering a series of questions about your business/organization and getting a report about ways to save energy and money.]

1 Yes
2 No – SKIP to D5
98 Refused – SKIP to D5
99 Don't Know – SKIP to D5

D4b
On a scale of 1 to 5, with 1 being not at all, and 5 being very much, to what extent did the online Energy Survey improve your awareness of ways you can reduce energy use and save money on your organization's electricity bill?

#Rating from 1 to 5
98 Refused
99 Don't know

D5
What trade organizations, publications, or conferences do you regularly consult or attend to stay informed about your industry and business operations?

1 California Small Business Association
2 Small Business Administration
3 Small Business Survival Committee
4 National Small Business Association
5 America's Best Companies
6 National Business Incubation Association
7 National Association of Small Business Investment Companies
8 California Independent Grocers Association
9 California Grocers Association
10 National Association of Convenience Stores
11 Food Marketing Institute
12 The Energy and Technical Services Conference
13 United Food and Commercial Workers International Union
14 *Progressive Grocer* (trade publication)
15 Other trade organization (SPECIFY_____)
16 Other publication (SPECIFY_____)
97 None
98 Refused
99 Don't Know

Awareness of Direct Install Program and Barriers to Participation

A1a
SCE currently offers equipment such as lighting and exit signs to small businesses like <COMPANY_NAME> at no cost to you. This free equipment is part of SCE's efforts to reduce your energy use and save money on your electric bill. Have you ever been contacted by SCE or another company offering free lighting fixtures and free installation? [IF NEEDED: Other companies working with SCE include vendors such as FCI Management Consultants and California Retrofit, Inc., (CRI).]

1 Yes
2 No – SKIP to A2a
98 Refused – SKIP to A4
99 Don't Know – SKIP to A2a

A1b
Did your business/organization accept SCE's/the vendor's offer to replace existing lighting equipment at your business?

1 Yes – SKIP to A3.8
2 No
98 Refused – SKIP to A4

99 Don't Know – SKIP to A4

A1c
What were the primary reasons that you did not want SCE/the vendor to complete this work? [ACCEPT MULTIPLES]

1 Decision maker/owner/manager was not available – SKIP to A4
2 Language barrier – SKIP to A4
3 Bad timing (i.e., Vendor should show up at a different time) – SKIP to A4
4 Always too busy/Don't ever have time – SKIP to A4
5 Don't trust people who just stop by – SKIP to A4
6 Vendor didn't show ID – SKIP to A4
7 Product must not be that good if it is free – SKIP to A4
8 There must be a "catch"/Don't believe that it is free – SKIP to A4
9 Don't understand why SCE wants me to use less electricity – SKIP to A4
10 I didn't need new equipment/Nothing was broken – SKIP to A4
11 I didn't qualify to receive the equipment – SKIP to A4
12 Other (SPECIFY _____) – SKIP to A4
98 Refused – SKIP to A4
99 Don't know – SKIP to A4

A2a
If someone visited your company/organization in person to offer free lighting fixtures and free installation, without first making an appointment, what is the likelihood that you would accept this offer? Please give your response on a 1 to 5 scale, with 1 being not at all likely, and 5 being very likely.

#Rating from 1 to 5 [If rating is 4 or 5, SKIP to A3]
98 Refused - SKIP TO A4
99 Don't know - SKIP TO A4

A2b
[Only ask if A2a = 1, 2, or 3]
What are the primary reasons you would not accept this offer?

&Explain
98 Refused
99 Don't know

A3
To what extent would your likelihood of participating increase if they made an appointment to meet with you (as opposed to just stopping by)? [READ RESPONSES]

1 Not at all
2 Somewhat
3 Very much
98 Refused
99 Don't know

A3.8
Did SCE/the vendor install this equipment?

1 Yes – SKIP to A4
2 No
98 Refused – SKIP to A4
99 Don't Know – SKIP to A4

A3.9
Do you know why this equipment was not installed?

&Explain
98 Refused
99 Don't know

A4
Who (job title) at your business/organization needs to approve changes to lighting or other types of equipment before they can occur?

1 Store manager
2 Shift manager
3 Administrative assistant/Secretary/Office manager
4 Accountant/Business manager
5 Other facilities management/Maintenance position
6 Other financial/Administrative position
7 Proprietor/Owner/President
8 Other (Specify_____)
98 Refused

A5
In the future, how would you prefer to be contacted about the free installation of lighting equipment? [READ RESPONSES; ACCEPT MULTIPLES]

1 In-person visit
2 By mail
3 Email
4 Other (Specify _____)
98 Refused
99 Don't know

A6
Who would you trust to make suggestions about changing the lighting at your business/organization? [READ LIST; ACCEPT MULTIPLES]

1 SCE Representative
2 Lighting Contractor/Vendor
3 Energy Service Company (ESCO)
4 Trade Organization
5 Local Community Organization or Faith-Based Group (SPECIFY_____)
6 Building Owner
7 Other (SPECIFY _____)
97 None
98 Refused
99 Don't know

A7
[SKIP IF D5 = None AND A6 = None]
You mentioned that you regularly consult [**response(s) from D5**] and would trust [**response(s) from A6**] to make suggestions for your business/organization. What is the likelihood that you would accept free lighting and free installation if they made the offer?
Please give your response on a 1 to 5 scale, with 1 being not at all likely, and 5 being very likely.

#Rating from 1 to 5
98 Refused
99 Don't know

End Survey

ES1
We've been talking about SCE's offer to change lighting equipment at your business/organization at no cost to you. SCE is interested in getting businesses/organizations like yours to accept this offer. What suggestions do you have for persuading businesses/organizations like yours to accept free lighting equipment and installation from SCE?

&Response
98 Refused
99 Don't Know

ES2
Is there anything else you would like to add that could help SCE assist you in reducing your electricity bill?

&Response
98 Refused
99 Don't Know

ES2a
Now I'd like to confirm the mailing address so we can send you the $25 check. Is the following the correct address to mail the check?

<SERVICE_ADDRESS>
<SA_CITY>
<SA_STATE>
<SA_ZIP>

1 Yes, that is correct
2 No (ENTER CORRECT DATA_____)
98 Refused

ES2b
And what is your name so I can make the check out to you?

&Name
98 Refused

Those are all of the questions I have for you today. You should receive your check in about 3-4 weeks.

Thank you so much for your time, your insights are extremely valuable to SCE. Have a great day!

Small Business Customer Survey

Survey Objectives: To learn primary reasons small businesses participate or do not participate in SCE's energy efficiency programs; to learn about current state and information sources small businesses utilize for information, etc.

Sample Frame: SCE customers in the 0-99 kW demand use category with SIC codes in the following categories: office, restaurant, grocery/food, retail, and miscellaneous commercial.

Introduction & Identify Appropriate Respondent

Q1

Hello, this is _____of Quantum Market Research, calling on behalf of Southern California Edison. We are contacting small businesses in SCE's service area to help SCE improve the programs they offer to small businesses to help reduce their electricity bill. May I speak with the owner, manager, or someone else responsible for making general business decisions for <COMPANY_NAME> at <SERVICE_ADDRESS>?

1 Yes – CONTINUE TO Q2
2 No, this person is not available right now [Ask when available or leave message.] CALL BACK LATER
3 No such person [Probe for the individual responsible for reviewing and/or paying utility bills, and/or purchasing major equipment. IF STILL "NO SUCH PERSON," THANK & TERMINATE.]
4 There is no one here with information on that address/Wrong address [THANK & TERMINATE]
5 We are the property management company/lessor for that address [SKIP TO Q3a]
98 Refusal – THANK & TERMINATE

Q2

Hello, this is _____ of Quantum Market Research, calling on behalf of the Southern California Edison. We are contacting small businesses to help SCE improve the programs they offer to small businesses like yours to help reduce your electricity bill. We are interested in learning about learning more about your business decisions, particularly those that affect your electricity use. We are offering you $25 in exchange for only 15 minutes of your time to answer some questions. Your input to SCE's will be very valuable to ensuring it provides its small business customers with quality service and information about how to manager their electricity use. Is this a good time for you or is there a better time I can call you back?

1 Yes - SKIP to C1, [PROCEED WITH SURVEY]
2 No – SCHEDULE CALLBACK
3 We are the property management company/lessor for that address [CONTINUE TO Q3a]
98 Refusal – THANK & TERMINATE

Q3

Is your company responsible for contracting for heating, cooling, and lighting equipment replacement and repair services for the property at <SERVICE_ADDRESS> and for other properties you manage? Or is someone else, such as the owner or tenant responsible for maintenance and repairs?

1 Yes, we are responsible for contracting for heating, cooling, and lighting equipment replacement and repair services

2 No, the owner, tenant, or someone else is responsible for contracting for heating, cooling, and lighting equipment replacement and repair services.
98 Refusal
99 Don't Know

Q4
Is your company responsible for paying the electricity bill for this and other properties you manage?
1 Yes, we pay the electricity bill
2 No, the tenant, or someone else is responsible for paying the electricity bill.
98 Refusal
99 Don't Know

[IF BOTH Q3 AND Q4 = NO or refusal, or DK – THANK & TERMINATE]

Q5
SCE is interested in learning more about how to help small businesses reduce their electricity use, including tenants of the properties your company manages, particularly by providing financial incentives to help pay for more energy efficient lighting, heating and cooling equipment. Would you be willing to participate in a short phone survey at a later date?
1 Yes
2 No – THANK & TERMINATE

Q6
Great. Let me just confirm your company name, your name and phone number.
Company Name: _____
Contact Name: _____
Contact Phone (incl. area code): _____

Q6
What time of day is generally best for you?
Record response: _____

Customer/Business Background

C1
First, what is your job title?

[Do not read from list.]

98 Refused

Now I'd like to ask you a few questions about your business.

C2
What kind of business or organization is <COMPANY_NAME> ?

[Do not read. If necessary, probe categories.]
1 Office - Non-medical
2 Office - Medical

3 Retail (excluding food sales)
4 Restaurant
5 Grocery store/Meat or Produce market
6 Liquor Store / Convenience Store (excluding service stations)
7 Service Station
8 Manufacturing/Process
9 Beauty Shop/Salon
10 Religious Organization/Church
11 Automotive Repair Shop (General Repair)
12 Automotive Repair Shop (Top & Body Repair and Paint)
13 Other (Specify _____)
98 Refused
99 Don't Know

C3

Is this location at <SERVICE_ADDRESS>.... [Provide <SA_CITY> and/or <SA_DESCRIPTION> if necessary]

[Read list.]

1 Your company's/organization's only location
2 A franchise location
3 A headquarters location of an organization with multiple locations
4 A branch location of a larger organization
98 Refused
99 Don't Know

C4

What is the primary language spoken at this location?

1 English
2 Spanish
3 Chinese
4 Other (SPECIFY)_____
98 Refused
99 Don't Know

C5

At this location, does <COMPANY_NAME> occupy a single, stand-alone building, or do you occupy a portion of a building that includes other businesses or residences?

1 Occupy whole building
2 Occupy portion of building
98 Refused
99 Don't Know

C6a

Does your business/organization own or lease this space?

1 Own this space
2 Lease this space
3 Own a portion and lease the remainder
98 Refused

99 Don't Know

C6b
[If lease (2 or 3)]:
Does your business/organization pay its own electric bill directly to SCE, or is electricity provided in your lease arrangement?

1 Pay own electric bill
2 Part of the lease arrangement
98 Refused
99 Don't Know

C7a
[If C6a = 2 or 3]:
Does your lease allow you to make tenant improvements (such as replacing lighting fixtures, replace carpet, replace equipment, construct walls, paint) at this location?

1 Yes
2 No
98 Refused
99 Don't Know

C7b
[If yes]:
If you were to make any such changes, and you discontinued your lease, would you have to change the space back to how it was originally, or could you leave the changes?

1 Yes – would need to change back
2 No – could leave changes
98 Refused
99 Don't Know

C8
[If C6a = 2 or 3]:

Businesses or organizations such as yours often hire contractors to replace equipment or make repairs. SCE is interested in learning who makes decisions and hires contractors to replace or repair light fixtures or heating and cooling equipment – whether it's you, the building owner, a property management company - or maybe in some cases instead of hiring a contractor, you (or someone else at the company) do the work yourself. Next I'm going to list different types of tasks, and I'd like you to tell me who hires contractors – for each one, I'd like you to tell me if it's you, the building owner, a property management company, or if you do the work yourself instead of hiring a contractor.

Who typically hires contractors to:

C8a Conduct day-to-day building operations and maintenance (inside the building)?

1 We/my company hires the contractors
2 Building Owner
3 Property Management Company
4 We/my company does this work ourselves
98 Refused
99 Don't Know

C8b Regularly service heating, cooling, plumbing, and/or electrical equipment?

1 We/my company hires the contractors
2 Building Owner
3 Property Management Company
4 We/my company does this work ourselves
98 Refused
99 Don't Know

C8c Repair heating, cooling, plumbing, and/or electrical equipment?

1 We/my company hires the contractors
2 Building Owner
3 Property Management Company
4 We/my company does this work ourselves
98 Refused
99 Don't Know

C8d Install heating, cooling, plumbing, and/or electrical equipment?

1 We/my company hires the contractors
2 Building Owner
3 Property Management Company
4 We/my company does this work ourselves
98 Refused
99 Don't Know

C8e Remodel building/space?

1 We/my company hires the contractors
2 Building Owner
3 Property Management Company
4 We/my company does this work ourselves
98 Refused
99 Don't Know

C9

For some companies/organizations, there might be a certain time of year that they are more likely to make improvements to their business. There might be times when your business is slower or you have a greater budget to allow for improvements. What time of year are you most likely to make improvements for your business?

&Response
98 Refused
99 Don't Know

C10

If someone were to call or stop by your business/organization, what time of day would be best for you? [DO NOT READ OPTIONS. CODE MULTIPLE SELECTIONS IF NECESSARY TO CAPTURE RESPONSE]

1 before 7 am
2 7 to 8 am
3 8 to 9 am
4 9 to 10 am
5 10 to 11 am
6 11 am to 12 noon
7 12 noon to 1 pm

8 1 to 2 pm
9 2 to 3 pm
10 3 to 4 pm
11 4 to 5 pm
12 5 to 6 pm
13 6 to 7 pm
14 7 to 8 pm
15 8 to 9 pm
16 after 9 pm
17 Any Time
18 Never
19 Other (SPECIFY_____)
98 Refused
99 Don't Know

Awareness of and Participation in SCE Programs

AP1a
Are you aware of SCE's energy efficiency programs that provides financial incentives to its small business customers to help pay for energy efficient lighting, heating & cooling, [If = "Grocery Stores (Food/Liquor)" or "Restaurants" then also add "and refrigeration"] equipment?

1 Yes
2 No – SKIP to D1
98 Refused – SKIP to D1
99 Don't Know – SKIP to D1

AP1b
[If AP1a = 1:]
What programs are you aware of?

1 Rebate/incentive program(s)/Express Efficiency [These programs offer rebates for the purchase of energy efficient equipment.]
2 Online energy audits/surveys [This survey involves answering a series of questions about the business and getting a report about ways to save energy and money.]
3 Flex-Your-Power [This voluntary program is publicized via TV, radio, and newspaper ads. Customers are asked to use less electricity during peak demand periods (e.g., turning of the A/C for a period of time on hot days).]
4 Other (SPECIFY_____)
98 Refused
99 Don't Know

AP2
[If AP1a = 1]:
How did you first learn about SCE's incentive program(s)?

1 Respondent approached contractor/ESCO/A&E firm/other 3rd party
2 Respondent approached SCE concerning another matter and learned about the program
3 Informed by SCE Representative
4 Informed by contractor/ESCO/A&E firm/other 3rd party
5 Utility brochure in mail
6 Bill insert / pamphlet in SCE bill
7 Word-of-mouth from friends, family, co-workers
8 TV, radio, newspaper ad

9 Magazine or trade publication
10 Participation in previous years
11 Manufacturer information/suggestion
12 Community organization such as Chamber of Commerce
13 Respondent called their utility to complain about their electric or gas bill
14 Seminar/Class offered at CTAC
15 Seminar or Training Class sponsored by SCE
16 Seminar or Training Class NOT sponsored by SCE
17 SCE's website
97 Other (SPECIFY) _____
98 Refused
99 Don't know

[If AP1a = 1]:
AP3a
In the past 2 years, has your company/organization at <SERVICE_ADDRESS> received rebates from SCE for installing energy efficient lighting, heating & cooling [If = "Grocery Stores (Food/Liquor)" or "Restaurants" then also add "refrigeration"] or other equipment?

1 Yes
2 No – SKIP to AP3e
98 Refused – SKIP to D1
99 Don't Know – SKIP to D1

AP3b
[If AP3a = 1:]
What was the primary reason you participated in the rebate program?

1 Because of the rebates
2 To save money on electric bills
3 Because the program was sponsored by a utility
4 Helping protect the environment / reduce carbon footprint / reduce impact on climate change
5 Previous experience with other utility programs
6 Recommended by utility account reps
7 Recommended by contractors
8 Participation in previous years
9 It was free
10 To save money on equipment purchase
11 Referral from SCE's Energy Audit
97 Other (SPECIFY)
98 Refused
99 Don't know

AP3c
[If AP3a = 1]
Overall, how would your rate your experience in applying for incentives through SCE's program? [READ RESPONSES] Please consider the time it took to fill out the application, select equipment, install the equipment, etc. when you respond to this question.

1 Poor
2 So-so
3 Fair
4 Good
5 Excellent
98 Refused
99 Don't know

AP3d
[If AP3a = 1]
On a scale of 1 to 5, with a 1 meaning too low and a 5 meaning too high, do you feel that the rebate you received was too low, too high, or just about right to justify the purchase and installation cost of the energy efficient equipment?

5 Too high
4
3 Just about right
2
1 Too low
98 Refused
99 Don't know

AP3e
[If AP3a = 2]
What is the primary reason your company/organization has NOT yet participated in the rebate program? (DO NOT READ)

1 Electric/energy bill savings do not justify equipment cost
2 Obtaining a rebate/filling out application is a hassle
3 Rebates are too low
4 Will not be at location long enough to benefit from improvements
5 Not worth investing in improvements because I do not own the building
6 Too much time/hassle involved in selecting contractor
7 Need more information about energy efficiency equipment
8 Need more information about the program
9 Don't have time
10 Decrease in quality of customer experience
11 Reduced reliability of equipment
12 Not enough management/staff to oversee project
13 Building owner/property management company did not approve project
14 Too difficult to get building owner/property management company to approve a project
15 Did not know about the program/incentives at the time
16 Do not need to replace any equipment, it all works fine
17 Energy efficient lights do not provide adequate light
18 Other (SPECIFY_____)
98 Refused
99 Don't Know

Decision Influences

D1
How would you characterize your company's business outlook right now? Would you say it is … [READ RESPONSES]

1 Poor
2 So-so
3 Fair
4 Good
5 Excellent
98 Refused
99 Don't know

D2
Given the current economic situation, what are the top 3 concerns or issues your business/organization is facing right now?

&Response1: _____
&Response2: _____
&Response3: _____
97 None – no issues or concerns
98 Refused
99 Don't know

D3
Has the current economic situation affected your ability to make capital improvements such as upgrades to heating & cooling equipment, lighting, or refrigeration?

1 Yes
2 No
98 Refused
99 Don't Know

D4
Do you feel your business/organization will directly benefit from the economic stimulus package recently approved by President Obama?

1 Yes
2 No
3 Not aware of the economic stimulus package
98 Refused
99 Don't Know

[If D4 = 1 or 2]
D5
Have you taken action (done research, talked to local organizations, etc.) to learn how your business/organization might benefit?

1 Yes
2 No
98 Refused
99 Don't Know

D6
What is your average monthly electricity bill at this location?

$ Monthly bill amount
98 Refused
99 Don't know

D7
On a scale of 1 to 5, with 1 being not at all, and 5 being very much, how aware are you of ways you can reduce energy use and save money on your organization's electricity bill?

#Rating from 1 to 5
98 Refused
99 Don't know

D8
Do you feel there is the potential to reduce this electricity bill with no-cost and low-cost changes relating to equipment maintenance and behavior changes of your employees?

1 Yes
2 No
98 Refused
99 Don't know

D9
On a scale of 1 to 5, how sure are you that more energy efficient lighting, heating & cooling [If = "Grocery Stores (Food/Liquor)" or "Restaurants" then also add "and refrigeration"] equipment would save enough energy to justify the upfront equipment costs?

#Rating from 1 to 5
98 Refused
99 Don't know

D10
Who would you trust to give you information to help your business reduce electricity use? [ACCEPT MULTIPLE RESPONSES] Is there anyone else?

1 Contractor – mechanical, HVAC, electrical, lighting, refrigeration, general
2 Trade organization
3 Local community organization or faith-based group
4 Internet site (SPECIFY_____)
5 SCE
6 Southern California Gas Company/SoCalGas
7 Building owner
8 Property management company
9 Someone that owns/manages a business just like mine
10 Personal friend, family member
11 Other (SPECIFY_____)
98 Refused
99 Don't Know

D11
What trade organizations, publications, or conferences do you regularly consult or attend to stay informed about your industry and business operations? [ACCEPT MULTIPLE]

1 California Small Business Association
2 Small Business Administration
3 Small Business Survival Committee
4 National Small Business Association
5 America's Best Companies
6 National Business Incubation Association
7 National Association of Small Business Investment Companies
8 California Independent Grocers Association
9 California Grocers Association
10 National Association of Convenience Stores
11 Food Marketing Institute
12 The Energy and Technical Services Conference
13 United Food and Commercial Workers International Union
14 *Progressive Grocer* (trade publication)
15 Other trade organization (SPECIFY_____)
16 Other publication (SPECIFY_____)
97 None
98 Refused
99 Don't Know

D12
What would be the best way for SCE to inform you about opportunities for energy efficiency rebates and other services it offers small businesses*?*

1 Through contractors (mechanical, HVAC, lighting, electrical, general, etc.)
2 Through trade organizations
3 Through community or faith-based groups
4 Through franchise head quarters
5 Buying group or co-op
4 Internet
5 SCE – website
6 SCE – email contact
7 SCE – bill insert or other printed material mailed to me
8 SCE – telephone contact
9 SCE – energy audit of business – online
10 SCE – energy audit of business – in person
11 SCE – in-person visit by SCE representative
12 SCE – other (SPECIFY_____)
13 Other (SPECIFY_____)
98 Refused
99 Don't Know

End Survey

ES1
Is there anything else you would like to add that could help SCE assist you in reducing your electricity bill?

&Response
98 Refused
99 Don't Know

ES2a
Now I'd like to confirm the mailing address so we can send you the $25 check. Is the following the correct address to mail the check?
<SERVICE_ADDRESS>
< SA_CITY>
<SA_ZIP>

1 Yes, that is correct
2 No (ENTER CORRECT DATA_____)
98 Refused

ES2b
And what is your name so I can make the check out to you?
&Name:_____
98 Refused

Those are all of the questions I have for you today. You should receive your check in about 3-4 weeks.

Thank you so much for your time, your insights are extremely valuable to SCE. Have a great day!