

# **A Novel Method for Assessing Large Customer Wants and Needs**

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## **ABSTRACT**

This paper describes a recent effort to identify and incorporate the needs and wants of large customers within specific industry sectors as inputs to program design. Our primary hypothesis was that information from industry players, other than those typically involved in utility programs, can provide perspectives and suggest directions that may be broader and better aligned to customers' corporate needs than the usual utility program offerings. The problem was to design and conduct an evaluation study that would test the hypothesis and provide new or enhanced program directions. Five segments were chosen for study: the semiconductor industry, hospitals, aerospace, biotechnology, and preserved fruit and vegetable food processing. Small groups of industry specialists from each sector were recruited to participate in intensive, informal, one-day workshops designed to elicit qualitative information.

The industry specialists bring intimate but broad views of their industries' strategic needs, and by leveraging the expertise of these market actors, we could identify strategic opportunities that can stimulate customers to cooperate with utilities on issues of intrinsic interest to the industry, regardless of the presence or absence of direct financial incentives. In this regard, this study method differs from the typical approach to market research and program design, which is formulated within a framework designed from the perspective of facility managers who necessarily focus more or less exclusively on immediate issues such as reliability, power quality, and the need for financial incentives.

## **Introduction**

This paper describes a recent effort to identify the needs and wants of large customers within specific industry sectors as an input to program design. Southern California Edison Company conducted the study on behalf of the California investor-owned utilities<sup>1</sup> with the intent of enhancing statewide energy efficiency (EE) programs targeted to large nonresidential customers by providing key evaluation feedback to program planners and designers. Specifically, for each of the five focus segments, industry experts were brought together for a one-day workshop to identify and discuss the strategic needs and wants of large nonresidential customers within the respective focus segments. Overall, the project had three primary objectives: a) gather good market intelligence relating to strategic issues and market trends; b) identify the decision makers and industry-specific drivers that influence their decisions (both general and energy purchase decisions); and c) use the market research findings to inform program planners and help them to develop broad program approaches and more targeted initiatives. In what follows, we review the study method, present key findings and results, and discuss recommendations derived from the market research, which ultimately point to key considerations for designing programs that are better targeted to the needs of large customers.

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<sup>1</sup> The California IOUs include Pacific Gas and Electric Company, San Diego Gas and Electric Company, Southern California Edison, and Southern California Gas Company.

In this introductory section, we give an overview of the project concept, design, and study methods, and we highlight issues that arose during the course of the project and the steps taken to address them. In the following section, we present the main findings from the industry expert workshops, including segment-specific and generalized results. In the next section, we enumerate the main program recommendations stemming directly from the research. Lastly, in the final section, we present our conclusions and underscore what we believe to be important reasons for using basic customer research as an input to program planning and design.

## **Project Overview**

Historically, EE programs offered by utilities to large commercial and industrial (C/I) customers have focused on financial incentives, with a more recent emphasis on encouraging the delivery of services through energy services companies (ESCOs). Few of these programs have targeted specific industries and few have demonstrated optimal levels of participation or effectiveness. (Cf., e.g., Rufo *et al.* 2000.) Despite the monetary incentives offered, it seems possible that the design of these programs has been neither responsive to the needs and wants of large C /I customers nor reflective of the strategic issues of concern to particular industries.<sup>2</sup> In the past, energy efficiency has been promoted almost exclusively under the notion that rational buyers will make rational purchase decisions—including energy efficiency options. However, with the absence of good market intelligence on such issues as how to marry EE with the strategic objectives of the corporation, we often do not have a clear idea of who makes these decisions, how the decisions are made, and how we can convince decision makers to make energy-efficient choices. It has become apparent to most players that the lack of this information leaves unanswered such crucial questions as what the customers want and why they do not participate; thus the impetus for basic customer research on the decision-making practices and needs and wants of large business customers.

Typically, programs for large customers have been marketed to the facility managers and plant-level contacts developed by utility account executives/ representatives. Accordingly, the programs have primarily addressed the concerns of these managers (e.g., reliability, clean power, rebates for energy efficiency improvements) and have failed to reflect strategic issues of concern to particular industries. While these issues and tactics are important, the typical approach may miss strategic opportunities that can induce customers to cooperate with utilities on issues of intrinsic interest to their industry, not just given financial incentives.

Having this perspective in mind, our primary hypothesis was that information from industry players, other than those typically involved in utility programs, can provide insights and suggest directions that may be broader and better aligned to customers' corporate needs than the usual utility program offerings. In that framework, the problem was to design and conduct an evaluation study that would test the hypothesis and provide new or enhanced program directions.

## **Research Design and Methods**

First, an extensive literature review was conducted to identify lessons learned from previous research and gain background both for selecting industry segments and developing relevant information on those targeted. Sources reviewed included market segment analyses, industry reports and publications from the "Voice of the Customer" project of the Electric Power Research Institute (EPRI).<sup>3</sup> Secondary data provided the quantitative context: information such as overall segment size in the state,

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<sup>2</sup> This is not to imply that these issues are the only ones limiting program success with large customers. At the very least, regulatory requirements and the fear of process interruptions must also be considered in any comprehensive review.

concentration of large nonresidential customers, annual energy use, and other economic indicators were used as criteria to rank the targeted industries.

Ultimately, five California industries were chosen for study based on energy intensity, energy usage, intrastate geographic equity, broader economic importance, and growth. These five segments were the semiconductor industry, hospitals, aerospace, biotechnology, and fruit and vegetable processing. The set of industries chosen not only balanced the interests of different parts of the state, but also included both mature industries and industries on the rise. In addition, the sample of industries was intended to test the extent to which the research method might be applied.

Next, background information was gathered on each segment and to identify organizations and individuals particularly familiar with each. Small groups of industry specialists from each sector were then recruited to participate in intensive, informal, one-day workshops designed to elicit qualitative information.

Note that, for the most part, the workshop participants were not the large customers themselves, nor were they necessarily energy experts. Rather, they were people selected from professional associations, publications, academia, financial institutions, and consulting groups focused on each of the selected industries. In those cases where the participants were customers, they tended to be upper level executives and managers (CFOs, directors, industry association presidents, etc.); further, these individuals participated as general industry experts and not as representatives of their respective companies. Bringing together a core group of industry experts was the key design element of the project, and proved critical to our goal of gathering essential market intelligence to inform the program planning process.

As indicated, the workshops were designed to enhance and develop relevant and feasible utility programs for large customers. The initial focus of each workshop was on the structure of the industry, the needs and wants of large businesses within the focus segments, current industry trends, and factors likely to influence those trends. Only after industry needs and wants had been identified were participants asked to discuss their implications for energy-related product and service decisions, energy use, and demand. Then the workshop findings and recommendations (e.g., information on industry context, perceived needs, energy-related implications, and recommendations made by the industry experts) were analyzed qualitatively to elaborate the directions these might offer for novel utility support and partnering opportunities. Finally, these results were shared with utility planning advisors to obtain their reactions and comments on the suggested program directions.

## **Issues Arising During the Evaluation**

Given the innovative design of this evaluation, we were unsure about the course the project would ultimately take, but in the end, the research process worked well. The segments targeted for study were chosen on the basis of energy intensity and economic importance. To achieve a balance between commercial and industrial customers, we ranked sectors according to both energy consumption (which favored industrial processes) and customer revenues/sales data (which favored commercial businesses). Also, it was helpful during the planning stages to have available as a resource a research team member who was familiar with program planning, relevant market barriers, and industry characteristics that have an impact on energy use. This added information was used in conjunction with the findings from a literature review to further refine the list of industries targeted for study. In part, segments of particular

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<sup>3</sup> EPRI conducted a considerable volume of customer needs research in the late 1980s and early 1990s. This culminated in the development of CLASSIFY, a needs-based customer segmentation methodology and software, and a four-volume series of CLASSIFY-Profiles. (See Electric Power Research Institute [1995] and EPRI at [www.epri.com](http://www.epri.com).)

importance to utilities' EE efforts were chosen to help ensure the development of adoptable initiatives as a result of this research.

With regard to the expert workshops, a few important issues arose. First, a good screening process was necessary in order to have a successful workshop. We decided that the flow of the discussion and interaction amongst the participants was based on having a good mix of experts, having no one person dominate the discussion, and having full participation by all attendees. We wanted to keep the discussions informal and minimize the potential for posturing, but we found that lack of participation by any one participant could be disruptive to the process as well. We concluded that having a good recruiter and a good screening process minimized problems in these areas. We also sponsored an optional "get acquainted" dinner for the workshop participants that served as a warm-up session prior to the day of the discussion. This helped to lessen the formalities during the workshop because most of the participants were able to meet and interact informally during the dinner.

Additionally, we did not allow presentations by the participants, especially since the limited amount of time available for the workshops would not have made this feasible. Instead, individuals were encouraged to provide supplementary materials for us to incorporate into the study report.

All in all, the workshop process was highly successful, and we found that the participants were enthusiastic and eager to participate in the discussions. Our experts were collegial and each individual's contribution seemed to complement nicely the contributions made by the other participants.

Most important, it was essential to have a skilled facilitator guiding the workshop process. To get good information from the workshops requires that the experts interact with one another and be permitted to have a free discussion. Therefore, the facilitator must be skilled at guiding the process, as opposed to controlling it. In this regard, the facilitator must have experience in leading a focus group type setting and must be able to raise relevant questions that engender discussion, yet be restrained enough to abstain from joining in the discussion. The facilitator should ask clarifying questions when necessary but should not suggest answers or frame the content of the comments drawn from the participants. Appropriately, the six-hour session afforded sufficient time to cover relevant topics without creating spaces for lulls or gaps in the discussion.

## **Workshop Findings and Recommendations**

On reviewing the workshop findings, we found that we had verified a number of things that we already knew, but, more importantly, we gained new and significant insights. The information analyzed from the workshops was used to develop a market assessment and characterization of each industry segment. In turn, these assessments formed the basis for the program recommendations and served as the primary input given to program planners and designers. This section presents a summary of the main findings and sample expert recommendations from each of the industry workshops. As such, the bulk of the findings are industry-specific and reflect only the comments made by the respective workshop participants. Results that are more broadly applicable across most or all of the focus industry segments are presented last. (The complete report can be found at [www.calmac.org](http://www.calmac.org).)

### **Semiconductors**

A central theme communicated by semiconductor workshop participants was their intense need for speed to market. New chips are very high-value products, but the innovations described by Moore's Law<sup>4</sup> mean that the time available for capturing that value is limited. Accordingly, the industry

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<sup>4</sup> Historically, the industry has been able to increase the functionality of integrated circuits by leaps and bounds—roughly doubling the capabilities of computer chips every 18-24 months. Moreover, the industry has been able to do this while

emphasizes quality and speed of production above all else and values most that which it perceives will enable or improve productivity. This means that, despite their costs, other factors including energy usage are given lower priority. Participants also reported that current industry “cost of ownership” models excluded the costs of energy. Consequently, little attention has been given to process-level or facility-level metering and identification of best practices. Moreover, the industry practice of leaving to toolmakers both the design and the production of the tools used to make chips, has limited the development and use of EE measures in the production process. In fact, participants commented that toolmakers are given no requirements or incentives for achieving high levels of EE in the tools they manufacture, so they have no motivation to reduce the operating costs of the tools they provide.

Workshop participants offered the following recommendations, among others, for the semiconductor industry: 1) Offer incentives to tool makers to produce efficient chip-making tools; 2) Conduct industry-specific demonstrations of technologies such as high-efficiency AC systems in clean rooms; and 3) Provide funding for industry benchmarking.

## **Hospitals**

Participants of the hospitals workshop focused on the fact that hospitals are in a marginal position financially and have relatively little market power. Cost savings from EE and demand reduction programs are viewed quite favorably. However, as is widely recognized by EE professionals, most hospitals believe they have already captured the majority of savings that might be obtained from such basic energy conservation measures as lighting retrofits, HVAC controls, and motor change-outs, as well as the installation of cogeneration facilities. Perhaps the most important piece of new information gained from the workshop was to learn of the potential energy-related impacts of the seismic retrofit legislation (California Senate Bill 1953) that was passed in the aftermath of the Northridge earthquake. This law requires an estimated \$24 billion in retrofits and new construction over the coming decades. This means that California hospitals are a prime candidate to benefit from utility assistance, including design assistance and help with identifying relevant energy savings opportunities.

In fact, recommendations offered by participants centered on providing design assistance during the transition periods for meeting the requirements of the relevant seismic retrofit bill. A primary benefit, as viewed by participants, was the potential to decrease the time required for gaining approval of building and retrofit plans. Other recommendations dealt with the need for industry-specific demonstrations of available savings opportunities and funding to be used for benchmarking studies and to explore fuel-switching opportunities.

## **Aerospace**

The main concern voiced by aerospace workshop participants centered on the need to be the low-cost provider and the reliability of infrastructure supply— that is, the availability of skilled labor, raw materials, energy, and other commodities that form the base for the main enterprise of this industry. These companies face a critical problem with regard to the number of production processes that are moving out of the state. In order to win production programs, these companies must be the low-cost provider. In their view, decreasing energy costs alone is not sufficient to help aerospace companies win contracts, but lower energy costs can be a significant factor in improving the profitability of a given contract. Most important, however, is the need for reliable energy, since it is the key to avoiding costly production delays and meeting delivery schedules. Not surprisingly, their recommendations focused on concerns relating to increasing energy reliability.

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reducing the cost per function approximately 25% per year. This trend is known as Moore’s Law, in honor of Gordon Moore, one of the founders of Intel, who first made the observation/prediction about industry progress in 1965.

## **Biotechnology**

The central themes arising from the biotechnology workshop dealt with managing financial risks and having access to a reliable infrastructure supply, including a highly trained workforce and reliable, low-cost inputs for their expanding manufacturing operations. Participants also pointed to concerns over the potential for price controls and the addition of new regulatory burdens that could stifle industry growth. Participants emphasized that the industry is undergoing a transition from a predominant focus on research to more of a manufacturing focus as companies begin to manufacture the products that have been in development and testing for years. Similar to the case for hospitals, this suggests that the biotechnology industry may be a prime candidate for utility assistance in such areas as building design, commissioning, and benchmarking as these companies begin to expand manufacturing facilities to meet new capacity demands. Moreover, as with members of the hospitals workshop, the participants were favorable toward establishing partnerships with the utilities as a means of dealing with their current energy needs, especially in light of changes to the electricity market as a result of deregulation.

## **Preserved Fruit and Vegetable Processing**

According to participants, a major determinant of behavior in the fruit and vegetable processing industry stems directly from changes in the structure of the market for supermarket retailing. Consolidation in retail food markets and customer lifestyle changes have created a need to find efficiencies in production and at the same time meet demands for certain food items and specialty convenience products. Not surprisingly, cost containment was a central concern expressed by workshop participants. Keeping costs low is an important factor in maintaining market share, which is also a key issue in dealing with international competition in food production. While seeking to be a low-cost provider makes fruit and vegetable processing companies highly receptive to investigating the benefits of energy conservation measures, the fact that their production is seasonal means that most EE measures have extremely long payback periods and most demand-reducing measures are too likely to interrupt time-critical processes. This often makes investment in such technologies infeasible.

Recommendations provided by this industry group included: open architecture for metering to enable companies to better manage their energy usage, targeting financial incentives toward upstream market actors such as equipment suppliers to fund energy-saving process improvements, and customizing EE programs to meet the seasonal needs of fruit and vegetable processors.

## **Broadly Applicable Results**

On a more general level, we found that strategic needs and wants tended to cluster by industry type. To see this, we categorized industries according to their business life cycle, and by the amount of regulatory pressures they face. In this sense, the biotechnology and semiconductor industries were viewed as growth industries, whereas, hospitals and the food processing industry were viewed as more mature industries. We designated the aerospace industry as either a growth or mature industry, depending on which segment within aerospace is being considered. The defense-related manufacturing segment is a mature industry, while the communications segment (satellite development) can be viewed as a growth industry. In addition, hospitals, aerospace, and food processing face the greatest regulatory pressures, with the semiconductor industry currently facing the least amount of regulatory constraint.

Overall, we found that semiconductor companies, communications-related aerospace, and biotechnology companies have similar strategic needs, most of which are technical in nature and related to ensuring reliable infrastructure supply. The other main strategic need for these industries is avoiding process interruptions. Hospitals, food processors, and defense-related aerospace companies share the

need to be a low-cost provider. For the first two, low energy cost is usually more important than avoiding interruptions. Lastly, hospitals, food processors, and aerospace companies are all concerned with mitigating their regulatory burdens.

In general, then, we can see that the more *mature* industries are particularly concerned with being the low-cost provider; in contrast, the *growth* industries are more focused on the expansion of their manufacturing operations. It follows then that the growth industries would place a lot of importance on the need to avoid process interruptions, whereas the more mature industries, which could also be characterized as “low-margin” businesses, would place a greater emphasis on cutting costs to make them more competitive. Most participants across industries stressed the need for continued availability of a reliable infrastructure supply and on mitigating regulatory burdens and constraints. However, the growth industries were primarily concerned with the effect of regulation on future growth and business prospects, while the mature industries were primarily concerned with the effect of regulatory requirements on costs. We suspect that these findings can be generalized to other industries at similar stages of development.

## **Program Recommendations**

A primary benefit of the expert workshops is that we were able to identify a number of strategic opportunities that are distinctly different from what we would have learned from facility managers. For example, we learned that the semiconductor companies are likely to be more receptive to EE programs if they are sold on the basis of their ability to improve productivity, as opposed to their reducing costs. Similarly, we found that hospitals face an estimated \$24 billion in retrofits and new construction over the coming decades which presents opportunities for introducing EE measures into the design process and that fruit and vegetable processors are interested in energy-saving process improvements but require EE programs that address the seasonality of their production.

Additional promising recommendations emerged from the *analysis* of the workshop findings and the information on the underlying needs and wants of large customers within the focus segments. Specifically, the research results derived from this evaluation suggest three main ideas: 1) Collaboration with industry players (both customers and industry representatives) may open up previously unused channels of program delivery; 2) Programs should avoid the “one-size-fits-all” approach; and 3) Utility programs may give new levers to industry decision makers. These ideas formed the basis of the recommendations made to program planners and the suggestions for improving overall program designs.

## **Collaboration with Industry Partners**

A common theme in the workshops was a request to form partnerships with the utilities as opposed to maintaining the supplier/client role. In this regard, we believe that the industry experts themselves may open up a previously unused source of delivery for utility EE programs. For example, in the semiconductor industry, utilities could collaborate with industry consultants to sponsor demonstration projects or to fund benchmarking studies. One benefit to be gained through this partnership would be that by capitalizing on the credibility of the industry consultant, the utility could counteract the perceived lack of relevant experience of its own staff. Similarly, utilities may benefit by leveraging existing relationships in specific industries by working with professional industry associations to address energy related issues.

Workshop participants also noted that for partnerships with industry to be successful, the utilities must demonstrate an understanding of the partner’s business and make longer-term commitments for working with industry. These new relationships should not replace the existing services provided by the traditional account representative; rather, they should be viewed as new ways to extend service and meet

the needs of large customers. In this regard, what is important is that the utilities must recognize that what is wanted is a different type and level of outreach to customers. Rather than simply selling energy conservation measures, utilities could address customer desires for strategic assistance and long-term partnerships.

### **Avoid the “One-Size-Fits-All” Approach**

Workshop participants in all segments echoed the sentiment that EE programs should be more industry-specific as opposed to taking a “one-size-fits-all” approach. Moreover, workshop results suggest that programs should be promoted as enhancing productivity first, and energy efficiency second. In this regard, participants suggested that industry-specific demonstrations and case studies would be particularly valuable. The information and details provided must demonstrate the relevance of an energy efficiency measure to the specific industry rather than be a general application of a technology. We believe that existing utility demonstration programs are well suited for this role and, with the assistance of expert industry consultants, can be tailored to address specific industry needs.

As an illustration of the difficulties of “one-size-fits-all” programs, participants in several workshops suggested that current public-purpose programs that encourage the involvement of ESCOs were ineffective. Participants argued strongly that if the extensive and standardized administrative and measurement and verification (M&V) requirements were reduced and the program focus was redirected to include process and system improvements, targeted customers would be more likely to view these programs favorably. This example seems to confirm results learned in program evaluations of the existing standard performance contract program (e.g., Rufo *et al.* 2000).<sup>5</sup>

### **Provide New Levers to Decision Makers**

We found that EE programs may provide decision makers with additional means to respond to their own strategic needs. For example, low-margin industries were more likely to have a favorable view of EE programs because these programs may offer companies new opportunities to cut costs.

In other cases, strategic assistance from the utilities could help to reduce the regulatory burdens faced by some industries. For example, design assistance from utilities to hospitals could be of considerable value. Not only could effective design templates help reduce operating costs, but they might also be developed in such a way as to secure pre-approvals from regulators and licensing bodies, so that the time required for obtaining approvals for individual building plans could be decreased. In addition, utilities could ensure that high efficiency HVAC equipment and back-up power generation facilities are installed which will result in future energy savings.

Similarly, industry customers might also benefit from educational information provided by the utilities. Participants suggested that facility managers could benefit from courses on how to make a business case for energy saving and load management activities in order to be able to effectively communicate with upper management. In addition, participants suggested that industry customers would benefit from accurate information on the future of the California energy markets, especially given the current environment that exists in California’s electricity market. Despite the current crisis creating some credibility gaps for the utilities, some workshop participants saw potential benefits of partnering with them. They stressed the importance of developing such relationships to the achievement of workable solutions for both the utility and industry.

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<sup>5</sup> These studies assessed factors affecting participation levels, among other issues, and led to changes in the M&V requirements for the current program. Follow-up studies will be needed to ascertain the degree to which program participation increases in response to the decreased burden of these requirements.



## Conclusions

The primary purpose of this project was to conduct market research on customer needs and wants for use in designing more effective and better-subscribed EE programs for those customers. What is different here is that we held workshops with industry experts to gather market intelligence as opposed to seeking the type of plant-level information one expects to learn from facility managers. We recognized that the industry specialists bring intimate but broad views of their industries' strategic needs. More importantly, by leveraging the expertise of these market actors, we were able to identify strategic opportunities that can stimulate customers to cooperate with utilities on issues of intrinsic interest to the industry, regardless of the presence or absence of direct financial incentives. In this light, the described study method improves upon the typical approach to market research and program design, which is formulated within a framework set up from the perspective of facility managers who necessarily focus more or less exclusively on their more immediate problems such as reliability, clean power, and the need for financial incentives. To the extent that the perspectives and insights provided by these industry experts are better aligned with the customers' corporate needs, program planners and designers making use of this market intelligence will be better equipped to develop programs that are more in tune with the customers' corporate needs and more likely to engage their involvement.

The key project goal was to test the hypothesis that information from industry players, other than those typically involved in utility programs, can provide perspectives and suggest directions that may be broader and better aligned to customer's strategic needs than the usual utility offerings. Our research results were based on five specific industries, but we found that strategic needs tended to cluster by industry type, by business life cycle, and the degree of regulatory pressure faced by an industry. Most important, we demonstrate that basic market research can play an invaluable role in the program planning process if the research results are used to align programs with the identified industry strategies and goals.

In some cases we confirmed things we already knew. However, we also gained several valuable new insights—even in industries that have been studied extensively. The important lessons learned are that an assessment of customer needs at the right level can yield critical information for program design for a particular market segment. Furthermore, program planners and managers must recognize the different types and levels of outreach desired by customers

For segments that are already well understood, this study method can still provide a means to quickly assess the current needs of the industry; for sectors that are less well studied, the research method can provide a quick overview of important industry characteristics and drivers that affect customers' energy purchase decisions and energy use.

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## References

Electric Power Research Institute (EPRI). 1995. *CLASSIFY-Profiles Volume 2: Commercial and Industrial Customer Needs and Energy Decision Making*. Palo Alto, Calif.: Electric Power Research Institute.

- Morgan, Rick and Tony Burnett. 2000. "Large Commercial Customer Account Management Strategies." *Proceedings from the 11th National Energy Services Conference*. Lake Worth, FL: AESP International. Pp. 153-158.
- Rufo, Michael, Robert D. Bordner, Pierre Landry, Julia K. Larkin, and Wesley Sullens 2000. "Evaluating California's Nonresidential Standard Performance Contract Program: Second-Year Results." *Proceedings from the 11<sup>th</sup> National Energy Services Conference*. Lake Worth, FL: AESP International. Pp. 406-421.
- Southern California Edison Company (SCE). 2001. *Large Customer Needs and Wants Study*. Rosemead, Calif.: Southern California Edison Company. (See [www.calmac.org](http://www.calmac.org))