

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

***Volume I of II: Core Process Evaluation
Study ID: SCE0288.01***

Submitted To:

Mr. Pierre Landry
Measurement & Evaluation Group
Energy Efficiency Division, CSBU
Southern California Edison Company

Submitted by:



Energy Market Innovations, Inc
83 Columbia Street, Suite 303
Seattle, WA 98104
T 206.621.1160

November 25, 2009

TABLE OF CONTENTS

EXECUTIVE SUMMARY	ES-1
1. INTRODUCTION.....	1
1.1.Study Objectives	1
1.2.Process Evaluation Approach	3
1.3.Organization of the Report.....	4
2. PROGRAM OVERVIEW.....	5
2.1.Summary of the BIS Program Theory	5
2.2.Express Efficiency (Itemized Measures)	6
Express Efficiency Participation Data Summary.....	6
Previous Process-Related Recommendations for Express Efficiency	7
2.3.Standard Performance Contract (Calculated/Customized Measures).....	8
SPC Participation Data Summary	9
Previous Process-Related Recommendations for the SPC Program	10
2.4.Audit Services (Nonresidential Audit).....	11
Nonresidential Audit Participation Data	12
Process-Related Recommendations of Prior Evaluations of the Nonresidential Audit Program ..	12
2.5.Pilot with The Southern California Gas Company	14
2.6.Analysis of Cross-Participation Across BIS Program Components	15
3. PROCESS EVALUATION APPROACH	18
3.1.Overview of Approach.....	18
Achievement of Program Goals.....	18
Operational Efficiency of the BIS Program.....	19
Delivery of the BIS Program	20
Integration of the BIS Programs with Other Initiatives	20
Impact of the BIS Programs on Barriers to Energy Efficiency	21
4. THE CUSTOMER PERSPECTIVE	23
4.1.The Overall BIS Participant Perspective	24
Participant Satisfaction	24
Barriers to Participation in Incentive Programs.....	27
Potential Barriers Associated with the Application Process.....	29
Incentive Program Awareness	30
Integration of NRA with Express Efficiency and SPC.....	30
Knowledge/Awareness of Energy Efficient Technologies	32
Summary of Participant Survey Findings	37
4.2.The Nonresidential Energy Audit Participant Perspective	38
How Respondents Learned About the Audit	38
Customer Satisfaction	40
Audit Recommendations.....	40
NRA Participant Awareness of Incentive Programs.....	41
Implementation of Audit Recommendations	42
Reasons That Customers Made Changes Without Applying for Incentives	44
Requested Support from SCE	46
Summary of Participant Interview Findings	46

4.3. The Near-Participant Experience	47
Application Status	47
Audit Program Awareness, Participation, and Influence	48
Satisfaction	48
Reasons for Discontinuation	49
Discontinued Applications	50
Resubmitted Applications	54
Summary of Near-Participant Interview Findings	55
5. THE MARKET PERSPECTIVE	57
5.1. Insight from Vendors that Sponsored Incentive Applications	58
Vendors' Overall Program Satisfaction	58
Application Requirements and Review	59
Vendors' Perceptions of Customer Awareness of Programs	61
Vendors' Use of BIS as a Marketing Tool	62
Support Provided by SCE	63
Summary of Vendor Interview Findings	65
5.2. Insight from Other Market Actors	65
Community-Based Organizations	66
Supply-chain Market Actors	69
Summary of Market Actor Interview Findings	73
6. LOOKING INWARD: INSIGHT FROM SCE STAFF AND THIRD-PARTY REVIEWERS.....	75
7. SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS.....	78
7.1. Key Process Evaluation Findings	78
7.2. Recommendations.....	81

LIST OF TABLES

Table 2-1: Summary of Express Efficiency Participation Data by Customer Demand Use Category	7
Table 2-2: Process-Related Recommendations of Prior Evaluations – Express Efficiency	8
Table 2-3: Summary of SPC Participation Data by Primary Market Segment and Customer Demand Use Category	10
Table 2-4: Process-Related Recommendations of Prior Evaluations – SPC	11
Table 2-5: Summary of NRA Participation Data by Primary Market Segment and Customer Demand Use Category	12
Table 2-6: Process-Related Recommendations of Prior Evaluations – NRA	13
Table 2-7: Overlap of Customer Participation across Express Efficiency, SPC, and NRA	16
Table 2-8: Overlap of NRA Participation with SPC and/or Express Participation, by Customer Demand Use Category	16
Table 3-1: Summary of Primary Data Collection	21
Table 4-1: Reasons for Not Implementing Any Audit Recommendations	28
Table 4-2: Program Awareness: Express Efficiency and SPC Participants	30
Table 4-3: Usefulness of Audits Results for Future Equipment Purchases or Projects	36
Table 4-4: Reasons for Usefulness of Energy Audit	36
Table 4-5: How Respondents Learned About the Energy Audit	39
Table 4-6: Implementation of Audit Recommendations	42
Table 4-7: Self-reported Changes as a Result of the Audit.	44

Table 4-8: Percent of Customers Who Applied for Rebates/Incentives and Implemented Audit Recommendations	45
Table 4-9: Factors Leading to Application Discontinuation.....	50
Table 5-1: Customer Awareness of Express Efficiency and SPC	61
Table 5-2: Are There Ways In Which SCE Could Market This Program More Effectively?	64
Table 5-3: Profile of Supply-chain Market Actor Interview Sample	69
Table 5-4: Influence of SCE's Incentive Programs on Respondents' Practices	70

LIST OF FIGURES

Figure ES-1: Overview of the Process Evaluation Approach.....	2
Figure 3-1: Overview of the Process Evaluation Objectives and Research Activities	19
Figure 4-1: NRA Participants' Satisfaction with the Audit	25
Figure 4-2: Express Efficiency and SPC Participant Satisfaction	27
Figure 4-3: NRA Participants' Awareness of Express Efficiency and SPC	32
Figure 4-4: Self-Reported Awareness of Energy-Efficient Equipment and Practices	33
Figure 4-5: Self-reported Awareness of Energy-Efficient Practices After BIS Participation	34
Figure 4-6: Program Influence on Participants' Knowledge of Energy Efficient Technologies.....	35
Figure 4-7: NRA Participant Awareness of Express Efficiency and SPC	42
Figure 4-8: Comparison of Satisfaction Ratings.....	49
Figure 5-1: Vendor Satisfaction, by Program and Activity Level	59

APPENDICES

APPENDIX A: DATA COLLECTION SUMMARY	A-1
APPENDIX B: DATA COLLECTION INSTRUMENTS	B-1

EXECUTIVE SUMMARY

This report presents the findings of the process evaluation of Southern California Edison's (SCE's) Business Incentives and Services (BIS) Program for program years 2006 – 2008. This evaluation, conducted by Energy Market Innovations, Inc. (EMI), covers the three BIS components targeted to SCE's nonresidential customers:

Express Efficiency (Itemized Measures) offered fixed per-unit rebates for the purchase of qualifying high efficiency equipment.

Standard Performance Contract (SPC, included Custom/Calculated Measures) offered customized financial incentives for high efficiency equipment/systems that are not eligible for or have different operating characteristics than assumed for the itemized measure incentive.

Nonresidential Audits (NRA) provided onsite energy audits of customer facilities to document current energy use characteristics and identify opportunities for energy efficiency improvements.

The 2006 – 2008 BIS Program was designed to integrate energy efficiency solutions (information services, design assistance, and financial incentives) to help nonresidential customers overcome barriers to energy efficient facilities and operations practices. The premise of an integrated approach is that gaps and overlaps that existed between the Express, SPC, and NRA under the “stand-alone” program approach would be eliminated, thereby resulting in a more comprehensive and effective approach to providing energy efficiency products and services to its nonresidential customers. The integrated approach was also intended to optimize internal program operations by reducing program administrative costs and consolidating various systems and staff functions.

Overview of Process Evaluation Objectives and Approach

The California Evaluation Framework defines a process evaluation as *a systematic assessment of an energy efficiency program for the purposes of (1) documenting program operations at the time of examination, and (2) identifying and recommending improvements that can be made to the program to increase the program's efficiency or effectiveness for acquiring energy resources while maintaining high levels of participant satisfaction.*¹ Consistent with this definition, this process evaluation was designed to document the operations and delivery of the BIS Program during the 2006 – 2008 program cycle. Key research questions to be addressed through this research include:

Did the 2006 – 2008 BIS Program achieve its (non-impact) goals, as stated in the Program Implementation Plan?

Did SCE improve the operational efficiency of the BIS components (compared to prior years)?

Was the BIS program delivery effective and successful?

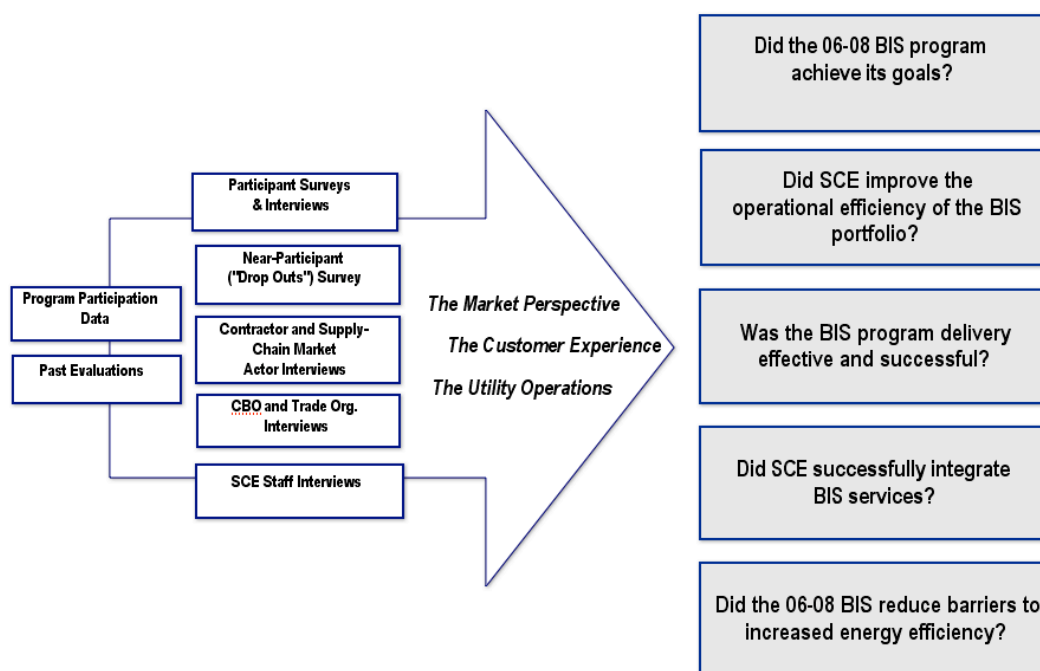
¹ TecMarket Works, et al. (2004). *The California Evaluation Framework*. California Public Utilities Commission. (p. 207)

Did SCE successfully integrate BIS services, and to what extent were BIS programs coordinated with other programs?

Did the 2006 – 2008 BIS reduce barriers to increased energy efficiency?

The primary and secondary research EMI conducted to address these research questions are illustrated in Figure ES-1. Insight into the customer experience with the BIS program was drawn from a survey and in-depth interviews with program participants and in-depth interviews from customers that submitted applications that expired or were discontinued. The market perspective was characterized from in-depth interviews with vendors that worked directly with participants to prepare incentive applications, supply-chain market actors, and community-based organizations and trade associations through which SCE has partnered with or could partner with in the future as a means for extending program outreach. Lastly, the evaluation examined the internal organization and operational efficiency of program delivery as a result of interviews with SCE program managers, account executives/account management staff, and contracted engineering firms that review customized project applications. Additionally, this process evaluation referenced the 2006 – 2008 PIP and previous evaluation studies of the Express, NRA, and SPC programs as primary points of reference.

Figure ES-1: Overview of the Process Evaluation Approach



In the early phases of the process evaluation research, several key considerations arose that affected the ultimate direction and scope of this project:

- First, SCE's efforts to restructure and optimize its nonresidential program delivery structure to support the development and implementation of its program plans for the new 2009 – 2011 program cycle began prior to and were ongoing throughout the course of this evaluation effort. Additionally, SCE contracted an additional study to review and optimize SCE's business processes to support its restructuring. As a result, some of the research tasks (primarily those

intended to document and assess internal program infrastructure and operations) were no longer necessary.

- Second, the investigation of integration of three stand-alone programs into a unified delivery strategy to fulfill the 2006 – 2008 objectives was identified as a key process evaluation objective. Thus, EMI devoted considerable resources to determine the extent of and the effectiveness of such integration.
- Third, the scope of this process evaluation was expanded to accommodate immediate research needs identified by SCE staff to inform the development of the 2010 – 2012 programs. In particular, EMI conducted several supplementary “niche” market research tasks, including research to investigate low participation rates for the small business direct install program, and a broader market assessment of small business customers. The supplementary research is presented in Volume II of this process evaluation report.

Key Findings

Extensive customer research was conducted for this process evaluation. The experience of program participants, overall, was very positive, evidenced by relatively high satisfaction ratings. The overarching conclusion of this research is that when the program “worked well” it provided customers with excellent service in a timely manner. However, this evaluation also revealed organizational and infrastructure weaknesses that appear to have negatively affected customers and their willingness or ability to participate in the program. Overall, the BIS program fared positively from the market perspective. That is, satisfaction with the program among contractors that sponsored project applications was strong, and the contracting industry relies using SCE’s programs as a marketing tool for their businesses. Consistent with the customer research results, the primary program weaknesses from the contractor perspective relate to the application and inconsistent application processing time.

Eight key findings were distilled from the process evaluation research.

Finding #1: Participant and Vendor Satisfaction with the Program is High.

Across all data sources, program participants and vendors that sponsored incentive applications on behalf of SCE’s customers were very satisfied and had good experiences with the program. Audit participants were very satisfied with the professionalism of the auditors, including their knowledge of the business’ equipment needs, their courteous manner, and providing valid identification and credentials. Express Efficiency and SPC customers are highly satisfied with the high efficiency equipment for which they received an incentive, and Express Efficiency and SPC participants were also very satisfied with the knowledge and level of support provided by SCE staff. Vendors that sponsored applications were generally satisfied with the programs; satisfaction was higher for those working with Express Efficiency applications, compared to those working with the more complex SPC applications.

Finding #2: The Level of Integration of the 2006 – 2008 BIS Program Components into a Unified Strategy is Low.

An important feature of the 2006 – 2008 BIS program that distinguished it from past program cycles was the intent to provide a single unified portal for providing a suite of energy efficiency products and services to SCE’s nonresidential customers. EMI examined the extent to which the integration was successful from several perspectives in this process evaluation. First, the analysis of program tracking data revealed a low percentage of cross-participation between the NRA program and the incentive

programs, indicating that only 8% of the audit participants had moved on to participate in the incentive programs. Second, audit participants were overwhelmingly unaware of Express Efficiency and SPC. The participant survey showed that 65% of Audit participants were not aware of Express Efficiency, and 78% were not aware of SPC. These results were underscored by results of participant in-depth interviews with small-business audit customers (an even larger percentage of which were not aware of the incentive programs).

The significance of this finding cannot be understated. First, there is a *significant lost opportunity for measurable energy savings* associated with audit participants that do not implement energy efficiency improvement projects and apply for incentives through SCE's program. Second, there is evidence of organizational and information system barriers that appear to pose significant obstacles to building a unified delivery strategy that offers end-to-end energy efficiency solutions. (These are discussed as separate findings below.)

Finding #3: Many Discontinued or Expired Applications Represent Lost Opportunities for Energy Savings.

The insight provided by customers with discontinued or expired applications revealed that many of these applications could have been resurrected if SCE was more attentive to assisting the customer to take corrective action. In many of the cases covered by this process evaluation, there does not appear to have been consistent "one-on-one" follow-up with customers to either alert them that an application had been rejected, discontinued, or expired and/or walk them through the process for resubmitting the application.

Finding #4: The Application Process is Considered to be Complex, and the Transaction Costs of Participation are Prohibitively High to Some Customers.

The complexity of the application process, particularly for SPC, was a top concern for customers and vendors alike, and is directly related to customer dropout from the incentive programs. Some customers or trade allies that encountered difficulty with the application decided at a certain point that the effort they have put into the application process exceeded the value of the financial incentive they may received. This was especially evident in interviews with small business near-participants, who may lack the staff resources to devote to the application process, and who expressed a desire for more assistance.

Finding #5: Partnerships with Community-based Organizations Are an Effective Avenue for Program Outreach to the Small Business Sector.

Representatives of community-based organizations and agencies interviewed for this study were overwhelmingly satisfied with the partnerships forged with SCE to support the utilities' program outreach efforts. Supply-chain market actors such as manufacturers and distributors noted that reaching small businesses can be difficult when language barriers exist or when the customer is uninformed or misinformed. There are other well-documented barriers for improving the energy efficiency in the small business sector that the core BIS programs do not appear to have overcome, such as the split-incentives barrier. However, from the CBO perspective, SCE's existing partnerships with CBOs are helping to overcome these barriers because small business owners rely upon and trust these organizations for a variety of business- and community-related support. The extent that SCE is viewed as a partner with these organizations has and will continue to help SCE better serve the small business community.

Finding #6: Vendors Use the Program as a Marketing Tool for their Business.

Vendors see tangible value in promoting the incentive programs to their customers. Nearly all vendors interviewed for this study claimed to use the program as a marketing strategy to sell high efficiency equipment to their customers. Some vendors have leveraged their involvement with the program to build a positive image with their customers after the sale is complete. Either way, the benefit of working with the program from the vendors' perspective is significant. SCE benefits because vendors are helping to market the program and facilitate customer participation, thus the relationship between SCE and vendors who sponsor customer applications is mutually beneficial.

Finding #7: SCE Account Representatives Play A Vital Role in Program Delivery.

The overwhelming majority of program participants learned about the program through an SCE representative. Not only are account representatives influential in increasing program awareness among customers, but assistance and follow-up from account representatives help customers get the technical support they need to complete applications in an accurate and timely fashion. Likewise, vendors sponsoring applications seek support from SCE staff to accurately complete and submit applications. Communication and follow-up from account representatives can help customers better understand why applications have been rejected and can help them identify the next steps for participating in the program. The customer research showed that those who were satisfied had good contacts at SCE to help them through the process, and those who were dissatisfied did not. *This finding — that an expensive marketing channel is responsible for a significant portion of the program participation — should be a signal that SCE needs to improve the self-service channels.*

Finding #8: Certain Components of the BIS Program Continue to Present Challenges.

The review of the 2002, 2003, and 2004-2005 evaluations for the three BIS program components found that, while the program has made great strides in responding to several areas for improvement, a handful of challenges have remained elusive over the years. Namely, this set of programs has struggled to streamline the application process, provide more technical support to SPC customers, provide consistent application requirements for SPC projects, use the NRA to market the incentive programs, update the NRA tracking database, and follow up with NRA participants. All of these recommendations occurred in more than one prior evaluation, and EMI's research suggests that all of these areas exhibit need for improvement. Based on these earlier evaluations and its own internal reviews during the 2006 – 2008 program, SCE is currently working on many of these issues, including streamlining the application process and updating program tracking databases.

Some recommendations that appeared more than once in prior years' process evaluations appear to have been successfully addressed by SCE, including allowing larger customers to participate in Express Efficiency, marketing the programs through vendors and providing vendors referrals, tailoring the audit to the customers' business, and collaborating with community-based organizations. While our analysis shows that 57% of SPC savings are attributable to industrial customers, 19% of NRA savings are attributable to industrial customers, suggesting that prior years' recommendations to focus on industrial customers have been met, but the NRA could continue to increase this focus.

Recommendations

This process evaluation offers the following set of recommendations to support SCE's ongoing program improvement initiatives.

Recommendation #1: Minimize Lost Savings Opportunities by Using Audits as a Resource for Marketing the Incentive Programs

One of the most significant key findings of this process evaluation is the Audit program's participants' low awareness of SCE's incentive programs and the low percentage of NRA participants that also participated in one of the incentive programs. To the extent that SCE has already invested resources into identifying energy efficiency improvement opportunities and informed customers about these opportunities, audit participants that are neither aware of or participate in the incentive programs are a lost opportunity for measurable energy savings. Moreover, to the extent that the audit participants have already expressed an interest in energy efficiency by their mere participation in the program, *the audit participant population should be viewed as the highest priority target market for the incentive programs.*

The interviews with SCE staff, third party engineering reviewers and other stakeholders provided a glimpse into why such integration has not been achieved thus far. This process evaluation and the separate business process optimization study of the calculated/customized processes reveal that there are many institutional and organizational barriers with the SCE organization that need to be overcome before such integration would be possible. The majority of institutional barriers seem to be related to the lack of an integrated information management system that would enable the easy access and seamless transfer of customer information, audit results, and incentive application documentation between all departments and stakeholders that need such information to do their jobs effectively and efficiently. This is not a trivial matter, and SCE should be credited with starting down the road of first understanding its existing processes and business requirements, and with beginning to address it a year ago.

Recommendation #2: Establish a Formal and Systematic Process for Providing Support to Customers that "Stall" in the Program.

Most of customers were satisfied and had a positive experience with the program. However, customers understandably expressed disappointment and frustration when their incentive application expired or was repeatedly rejected and they claimed to have not received adequate support from SCE to remedy the issue. Customers who were satisfied with the program had good contacts at SCE to help them through the process, while those who were dissatisfied did not receive adequate assistance from SCE.

This reveals an opportunity to create a systematic approach to customer relations and assistance with applications. Offering consistent customer support will allow SCE to capitalize on customers with whom SCE has already invested resources by preventing them from falling out of the program. Lost opportunities for energy savings and customer disappointment can be avoided by having Account Managers or other SCE staff designated with the responsibility of regularly following-up with customers that have initiated but not completed applications, participated in audits but not applied for incentives, or had applications rejected because of application errors or lack of program funding. Furthermore, a system for following up with Audit participants to provide guidance is paramount to the success of funneling Audit participants into the incentive programs.

Such "hand holding" might be viewed as too costly and might require the development of a new support function dedicated to SCE's Energy Efficiency Division (particularly for smaller businesses). However, the cost of not doing anything for customers that have "stalled" in the program might be even higher,

considering the resources that SCE has already invested (conducting an onsite audit, application review, etc.) and the savings that might result from the incremental investment of the “hand holding.”

Recommendation #3: Streamline and Reduce the Application Review and Processing Time.

The complexity of the incentive applications turns some customers away from program participation, and a review of the ease of application for both incentive programs is warranted.² Not all customers expressed having difficulty with the application, but results were not overwhelmingly positive with respect to the application process (from either the customer or vendor perspective). There are many research methods that could be employed to learn how customers complete the application materials and to identify specific areas that might be causing difficulty. Observing customers as they complete the application and verbalize their thoughts (“think alouds”) could be very revealing and valuable, particularly for the small business customers that are not as likely to have a vendor working with them to complete the application for them. It is important to acknowledge here that there already is a task force that has been working for over a year to redesign an “Integrated DSM Application.”

A corollary to this recommendation is the suggestion that SCE consider the discontinuation of its wet signature requirement. SCE is encouraged to consider the feasibility of additional online application components and at a minimum allow faxed or scanned signatures. Vendors reported that allowing faxed or scanned signatures would save considerable time and speed up the application process by avoiding making special trips to the customer’s facility just to get a signature for the application. (This is of course exacerbated if there are application errors and a new application needs to be developed.)

Recommendation #4: Continue and Expand Efforts to Develop Partnerships and Synergies with Local Governments, Community-Based Organizations, and Trade Organizations.

SCE’s efforts to work with CBOs and trade organizations appears to be successful and mutually beneficial, and should be continued and expanded. Particularly for hard to reach and “niche” customer segments (small business, restaurant, ethnic communities), and partnerships with local organizations are an effective means of program outreach.³

Recommendation #5: Review and Document the Program Theory and Logic

EMI’s review of the PIP concludes that the program theory for the 2006 – 2008 BIS is not explicitly documented. This is not a critical failure for the program, since SCE is well underway in developing the delivery strategies for its 2010 – 2012 programs. The recommendation here is that SCE review and refine the program theory and logic for the upcoming program cycle. The theory should explicitly document the rationale for the program design and should define the key activities, outputs, and the desired short and long-term outcomes. The logic model will visually illustrate the linkages between the activities and defined outputs and outcomes. Articulating the theory and outlining the program logic serves several purposes. Mainly, it will provide solid grounding for why the program(s) are designed as such. The program rationale and logic will serve as the anchor point upon which any program modifications and future evaluation research can be based and designed more effectively to assist SCE in understanding why certain aspects of program delivery were or were not successful.

² SCE is currently undergoing changes in streamlining the application process for the 2010 – 2012 program cycle.

³ See Volume II of this report for more information regarding barriers faced by small business customers.

Recommendation #6: Develop Key Performance Metrics.

After the program theory and logic are documented, EMI recommends that SCE develop sets of key performance metrics upon which progress toward SCE's internal goals of success can be tracked and measured. (Naturally, the development of key performance metrics is predicated upon the fact that SCE has or will establish goals for program achievements, beyond the overarching energy savings and demand reduction goals.)

Performance metrics should be established for all levels of SCE's Energy Efficiency Division and other divisions and groups that have responsibility for and support the delivery of its energy efficiency programs. Such metrics should be reflective of each group's underlying mission as well as its responsibilities with respect to the successful delivery of the energy efficiency. Examples of such metrics include (but are certainly not limited to): customer/participant satisfaction, production rate, incidence of application rejection, the portion of applications that are expired/withdrawn, SCE staff satisfaction, cost effectiveness, and application processing time.

Once established, SCE should establish the means for tracking the performance metrics over time on a regular basis. Generally, performance metrics are incorporated in management-level reports that are updated on a weekly, bi-weekly, and/or monthly basis.

1. INTRODUCTION

This report presents the findings of the process evaluation of the Southern California Edison's Business Incentives and Services (BIS) Program for program years 2006 – 2008. This evaluation, conducted by Energy Market Innovations, Inc. (EMI), covers three core program components that collectively accounted for one-third of SCE's nonresidential program annual energy savings goal for the 2006 – 2008 program cycle. These three core components align with commercial sector statewide programs that have been administered by SCE and other California investor-owned utilities (IOUs) since the 2002 – 2003 program cycle.

Express Efficiency (Itemized Measures) offered fixed per-unit rebates for the purchase of qualifying high efficiency equipment.

Standard Performance Contract (Custom/Calculated Measures) offered customized financial incentives for high efficiency equipment/systems that are not eligible for or have different operating characteristics than assumed for the itemized measure incentive.

Nonresidential Audits provided onsite energy audits of customer facilities to document current energy use characteristics and identify opportunities for energy efficiency improvements.

The program goal was to achieve 1,156,755 MWh of annual energy savings and 387.44 MW of summer peak demand reduction. The program budget was \$114 million.

The integration of these previously stand-alone programs is the result of SCE's effort to simplify and consolidate the entry point to energy efficiency products and services for all nonresidential customers. The Express Efficiency, Standard Performance Contract (SPC), and Nonresidential Audit (NRA) programs have been studied considerably over the past several years. This process evaluation sought to examine the effectiveness of each program component as well as SCE's ability to combine multiple programs into a unified delivery strategy.

1.1. Study Objectives

The California Evaluation Framework defines a process evaluation as *a systematic assessment of an energy efficiency program for the purposes of (1) documenting program operations at the time of examination, and (2) identifying and recommending improvements that can be made to the program to increase the program's efficiency or effectiveness for acquiring energy resources while maintaining high levels of participant satisfaction.*⁴ Consistent with this definition, this process evaluation was designed to document the operations and delivery of the BIS Program during the 2006 – 2008 program cycle. Key research questions to be addressed through this research include:

Did the 2006 – 2008 BIS Program achieve its (non-impact) goals, as stated in the Program Implementation Plan?

⁴ TecMarket Works, et al. (2004). *The California Evaluation Framework*. California Public Utilities Commission. (p. 207)

Did SCE improve the operational efficiency of the BIS components (compared to prior years)?

Was the BIS program delivery effective and successful?

Did SCE successfully integrate BIS services, and to what extent were BIS programs coordinated with other programs?

Did the 2006 – 2008 BIS reduce barriers to increased energy efficiency?

Key considerations that affected the ultimate direction and scope of this process evaluation were: 1) SCE's efforts to restructure and optimize its nonresidential program delivery structure to support the development and implementation of its program plans for the new 2009 – 2011 program cycle, 2) the expansion of the scope of this study to accommodate immediate research needs identified by SCE staff, and 3) the importance of integration of three stand-alone programs into a unified delivery strategy to fulfill the 2006 – 2008 objectives.

SCE's Restructuring the Business Processes and Delivery Structure of its Commercial Sector Energy Efficiency Program. This evaluation was planned and undertaken at a time during which significant policy deliberations influenced the development of the California IOU program plans for the 2009 – 2011 program cycle. In addition to increased energy saving and peak demand reduction goals, California initiated a ruling to investigate and facilitate Integrated DSM (IDSM) strategies to better align energy efficiency and demand response programs. To support the development of its 2009 – 2011 plans and meet new policy objectives, SCE initiated a significant restructuring of its internal organization and workflow processes. SCE also developed a new "vertically integrated" program delivery strategy by which energy efficiency products and services are aligned with key customer segments, compared to the 2006 – 2008 approach that were not specifically tailored to specific market segments.

Ideally, this process evaluation would have been completed prior to the development of the 2009 – 2011 plans to enable SCE to utilize the evaluation findings to the fullest extent possible. The development and ultimate approval of SCE's 2010 – 2012 plans in September 2009^{5,6} does not diminish the value of this process evaluation to SCE. First, because the new program cycle does not begin until January 1, 2010, SCE and the other IOUs have time to prepare and make adjustments throughout the "bridge period." Second, SCE's efforts to restructure and optimize its business processes did not end when the CPUC approved its program plans in September 2009. SCE continues to be engaged in numerous process improvements and other ancillary research efforts to gain market intelligence and develop an acute program delivery strategy.

The fact that SCE has *already* undertaken a significant transformation of its program operations necessitated that this process evaluation adopt a slightly different strategy than a more typical process evaluation. Most notably, the study objectives were revised and expanded to ensure the research could inform SCE's ongoing planning efforts. Documentation of the 2006 – 2008 operations and delivery became less important since much of the operations and delivery processes had already been changed. The evaluation team, in conjunction with the SCE evaluation manager, placed more weight on identifying success and shortfalls and areas in need of improvement.

⁵ California Public Utilities Commission. *Decision Approving 2010 to 2013 Energy Efficiency Portfolios and Budgets*. Decision 09-09-047. September 24, 2009.

⁶ Decision 09-09-047 changed the timeframe of the IOU portfolios from 2009 – 2011 to 2010 – 2012.

SCE's Immediate Need for Market Intelligence and Insight into Process Evaluation Findings. The objectives of this process evaluation evolved as the research team gained insight into BIS experiences and learned SCE's needs for market information to support the design of their 2010 – 2012 program strategy. Even though this full process evaluation report was not available to support the development of the new program plans, there were numerous opportunities for the evaluation team to informally provide preliminary findings to SCE, primarily through the evaluation manager. Additionally, the evaluation team solicited input from SCE program staff prior to the development of data collection instruments to identify their high-priority information needs.

In one particular instance, SCE's C&I Segment Solutions Manager brought forth several research questions to support the development of SCE's small business strategy, including the direct install program. SCE was additionally interested in participation barriers for large commercial offices. The scope of the process evaluation was expanded to include supplemental research, including:

- Targeted market research to characterize primary barriers to program participation and devise strategies for improving SCE's support for the small grocery and small commercial office markets.
- Targeted market research to investigate reasons why SCE's small commercial customers have not accepted SCE's direct install offer.
- Secondary research to help SCE understand the key decision-makers in the large commercial office market, strategies for reaching these decision-makers, and information regarding the *split-incentive* market barrier.

The results of both of these supplemental research tasks are included in Volume II of this process evaluation report, under separate cover.

Integration of BIS Services. As explicitly stated in the 2006 – 2008 Program Implementation Plan (PIP), the BIS Program was designed to integrate energy efficiency solutions (information services, design assistance, and financial incentives) to help nonresidential customers overcome barriers to energy efficient facilities and operations practices. The premise of an integrated approach is that gaps and overlaps that existed between the Express, SPC, and NRA under the "stand-alone" program approach would be eliminated, thereby resulting in a more comprehensive and effective approach to providing energy efficiency products and services to its nonresidential customers. The integrated approach was also intended to optimize internal program operations by reducing program administrative costs and consolidating various systems and staff functions.

This process evaluation deliberately explored the extent that the integration was successful and the extent that such efforts improved the administration and implementation of the BIS Program. EMI originally intended to examine integration with respect to 1) the delivery of program services and products, and 2) the streamlining and optimization of internal resources. The latter, however, became a lower priority because of SCE's restructuring, as discussed above.

1.2. Process Evaluation Approach

This evaluation utilized data and information gathered from numerous sources to achieve the research objectives outlined above. Insight into the customer experience with the BIS program is drawn from a survey and in-depth interviews with program participants and in-depth interviews from customers that

submitted applications that expired or were discontinued. The market perspective is characterized from in-depth interviews with vendors that worked directly with participants to prepare incentive applications, supply-chain market actors, and community-based organizations and trade associations through which SCE has partnered with or could partner with in the future as a means for extending program outreach. Lastly, the evaluation examines the internal organization and operational efficiency of program delivery as a result of interviews with SCE program managers, account executives/account management staff, and contracted engineering firms that review customized project applications.

1.3. Organization of the Report

This process evaluation is presented in two separate volumes. This report (Volume I) presents the core process evaluation of the BIS program. This report is organized in seven sections. Section 2 provides an overview of each of the three core BIS program components and summarizes process-related recommendations gleaned from past program evaluation reports. This section also summarizes the underlying program theory articulated in the PIP. Section 3 describes the process evaluation approach and summarizes the data collection upon which the process evaluation was based. Sections 4 and 5 present the process evaluation results from the customer and market perspectives, respectively, followed by the results of a brief review of SCE's internal organization and processes in Section 6. Lastly, Section 7 presents the key findings and offers recommendations for improvement.

Two appendices accompany this report. Appendix A provides details of each data collection effort, including the objectives, sample designs, and final samples. Appendix B includes the survey instrument and in-depth interview guides.

Volume II of this process evaluation (submitted under separate cover) includes the results of the small business and large commercial office supplementary research previously referenced.

2. PROGRAM OVERVIEW

This section summarizes each component of the BIS program, including a brief description and summary of process-related recommendations culled from past program evaluations. EMI recognizes that the BIS program components have a long history of process evaluations, thus it was important to examine prior evaluations to frame the current effort within the context of the prior findings. To review prior evaluation recommendations, EMI referenced past evaluations for the NRA, SPC, and Express Efficiency programs for the 2002 – 2003 and 2004 – 2005 cycles. EMI paid particular attention to recommendations that occurred across multiple evaluations and across multiple components of the BIS program.

Recommendations common to more than one program component involved tracking system improvements, using audits to market the incentive programs, focusing on industrial projects, and collaboration with community-based organizations. EMI considered these past evaluation recommendations in the analysis and presentation of key findings and recommendations in Section 7.

First, subsection 2.1 summarizes the BIS program theory, as reflected in the PIP. Subsections, 2.2, 2.3, and 2.4 summarize the Express Efficiency, SPC, and NRA components of the BIS program, respectively. Subsection 2.5 describes a related pilot program that SCE implemented jointly with the Southern California Gas Company. The section closes with a summary of EMI's analysis of program participation data for each of the core program components, with particular emphasis on the participation of customers in more than one program component.

2.1. Summary of the BIS Program Theory

Process evaluations typically involve assessing how closely a program's actual implementation follows the documented program theory and logic, in addition to identifying the strengths and weaknesses of the program's actual implementation in the field. In the absence of a formal articulated program theory and logic model, the evaluation team relied upon the program rationale articulated in the 2006 – 2008 PIP as the primary reference for the BIS program theory.⁷

Although not explicitly stated in the PIP, the BIS program theory is based upon the premise that providing customers with financial assistance to lower the first cost of high efficiency measures will induce them to purchase and install the measures, and that they would not have done so otherwise. The rationale assumes that customers will not remove the installed energy efficiency measures, and that the installation of these high efficiency measures will result in measurable energy savings and peak demand reduction. The BIS program theory also assumes that educating customers and increasing their knowledge and understanding of their facility's energy use characteristics (as a result of on-site facility audits) along with recommendations for energy efficiency improvements will encourage customers to implement energy efficiency improvement projects.

This underlying theory of the BIS program is similar to traditional energy efficiency incentive programs. The features of the BIS program that were new for the 2006 – 2008 program cycle did not change the underlying program theory. Rather, SCE changed the delivery strategy or processes through which program services are provided to its customers.

⁷ The 2006 – 2008 PIP provides a poor articulation of the program theory and the rationale underlying the program activities mentioned in the plan.

2.2. Express Efficiency (Itemized Measures)

Through the Express Efficiency Program, SCE's BIS Program offers prescriptive rebates to customers who purchase qualified energy efficiency measures. Referred to as *itemized* measures, each has fixed per-unit energy savings and a corresponding rebate. Itemized measures fall into the following end uses: lighting, food service, refrigeration, air conditioning, motors, office, and agriculture. Energy savings assumptions for the 2006 – 2008 program were based upon historical program data and the 2004 Database of Energy Efficient Resources (DEER).⁸

Note that a customer who purchases and installs an itemized measure may opt to apply for a calculated incentive under the SPC instead of the Express Efficiency program. The financial incentives available through the SPC program could be greater for facilities that have extended operating hours, or that operate 24/7 (a manufacturing or distribution facility, for example).

Express Efficiency Participation Data Summary

To characterize program activity and develop sample designs for the customer data collection efforts, EMI analyzed program-tracking data and other relevant data associated with participant sites provided by SCE. The raw Express Efficiency program-tracking database contained 11,467 observations, where one observation represents a single, unique measure. EMI cleaned the data and removed all observations with problematic contact information, erroneous customer numbers, and other suspect values. The cleaned program database included 11,454 observations, or measures, that were installed at 6,333 customer sites. The total tracked savings (at the time of the data extract) was 149,077,659 kWh per year.

Table 2-1 summarizes Express Efficiency program participation data by customer demand use category.⁹ Nearly half (46%) of the tracked savings are associated with measures installed by medium sized customers (100-299 kW). The remainder is split evenly between Very Small/Small customers (0-99 kW) and Large customers (500+ kW).

⁸ See <http://www.energy.ca.gov/deer/>

⁹ EMI also analyzed the distribution of Express Efficiency participants by the SIC code assigned to each customer in SCE's tracking system. Unfortunately, 73% of the observations were missing the SIC code and because of the tight project schedule, the required data was not available from SCE in time for this research.

**Table 2-1: Summary of Express Efficiency Participation Data
by Customer Demand Use Category**

Customer Size Category	# Observations	# Sites	Sum of Tracked kWh Savings	% of Tracked kWh Savings
Very Small (0-19 kW) & Small (20-99 kW)	5,541	3,507	39,255,249	26%
Med (100-499 kW)	4,171	2,049	68,316,921	46%
Large (500+ kW)	1,302	496	39,496,436	26%
Missing customer size	440	281	2,009,052	1%
Total	11,454	6,333	149,077,659	100%

a. EMI attempted to classify Express data by primary and secondary market segments by SIC or NAICS code. However, SIC codes were not included for almost half of the observations.

b. This table summarizes participation data that has been “cleaned” specifically for the process evaluation. It should not be construed as the final tracked savings used for impact evaluation purposes.

Previous Process-Related Recommendations for Express Efficiency

Recommendations for the process evaluations for Express Efficiency in 2002, 2003, and 2004-2005 are shown in Table 2-2. Of the 10 recommendations, four were presented in more than one evaluation report. These include recommendations to incent vendors to increase participation of very small customers, non-CFL projects, and multi-measure projects. More than one recommendation suggested allowing larger customers to participate and speeding up the application process (specifically by allowing online submission). All three evaluations mentioned marketing the program through vendors and providing vendor referrals.

Table 2-2: Process-Related Recommendations of Prior Evaluations – Express Efficiency

#	Recommendation	Program Year		
		2002	2003	2004-2005
1	Use Audits as a marketing opportunity ^(a)	X		
2	Leverage CBO partnerships; allow customers to sign up on the spot ^(b)	X		
3	Incent vendors to increase participation of very small customers and non-CFL/multi-measure projects	X	X	
4	Alter HTR targets and expand eligibility requirements to include large customers (more program flexibility)	X	X	
5	Market the program through vendors/provide vendor referrals (04-05; continue to market the program through vendors and utility reps)	X	X	X
6	Speed up the application process (including development of online application process)		X	X
7	Employ a cost-effective & comprehensive inspection process (inspect all large and a random sample of small applications)		X	
8	Increase outreach to non-participating vendors			X
9	Improve communication with vendors and distributors			X
10	Consider low-cost or no-cost financing options			X

a. While this table refers only to Express Efficiency evaluation recommendations, this recommendation to use audits as a marketing opportunity was also presented in the 2003 and 2004-2005 NRA evaluations.

b. Collaboration with CBOs was also recommended in the 2004-2005 evaluation of NRA.

2.3. Standard Performance Contract (Calculated/Customized Measures)

Through the Standard Performance Contracting (SPC) program, SCE's BIS program offers financial incentives for customized energy efficiency upgrade projects. This program provides a mechanism through which the diverse needs of the nonresidential sector can be addressed, and more customized, complex projects can be developed. Financial incentives are based upon the estimated annual kWh savings documented on the submitted incentive application. Measures not listed as itemized or for which energy savings are dependent upon project specific characteristics (operating hours, load factor, building type, etc.) were considered *calculated* measures. Savings for calculated measures can be estimated using industry-accepted software, or the customer can provide engineering calculations to justify the savings estimate. *Customized* measures include measures and processes for which savings cannot be easily modeled because of lack of industry experience and that are not itemized or calculated. More detailed documentation to support the estimated savings is required for such projects; customized projects are also subject to more rigorous engineering analysis and verification of savings prior to issuance of the incentive.

The maximum total incentive paid was 50% of the cost for each project, up to \$2.4 million of the total project cost. The incentive structure established for the calculated and customized projects is provided below:

Lighting	\$0.05/kWh
Air conditioning & refrigeration	\$0.14/kWh
Controls and other equipment	\$0.08/kWh

In addition to providing financial incentives, SCE staff (account managers and engineers) worked with customers to identify projects, estimate energy savings, and assist in application development. SCE utilizes a network of vendors, contractors, and energy service companies to disseminate program materials and resources and to market and use the program as a sales tool to support their own business.

Pre- and post-installation inspections were required for most calculated and customized projects. Incentive payments were issued after the post-installation verification and review of achieved energy savings.

SPC Participation Data Summary

To characterize program activity and develop sample designs for the customer data collection efforts, EMI analyzed program-tracking data and other relevant data associated with participant sites provided by SCE. The raw SPC program database provided to EMI included 4,061 observations, with one observation representing a single, unique measure. EMI removed observations with problematic contact information, erroneous customer numbers, and other suspect values. The cleaned SPC database included 3,986 observations, or measures, that were installed at 2,453 customer sites. The total tracked savings (at the time of this data extract) was 761,342,249 kWh. Table 2-3 summarizes participation data by primary market and customer demand use segments. As expected, the large customer demand segment accounts for the majority (63%) of the annual kWh savings. Almost 60% of the tracked kWh savings are associated with industrial customers.

Table 2-3: Summary of SPC Participation Data by Primary Market Segment and Customer Demand Use Category

Primary Market Segment	# Observations	# Sites	Sum of Tracked kWh Savings ^(a)	% of Tracked kWh Savings
Commercial	2,842	1,830	296,053,847	39%
Industrial	866	495	435,406,372	57%
Agricultural	278	128	29,882,030	4%
Total	3,986	2,453	761,342,249	100%

Customer Demand Use Category	# Observations	# Sites	Sum of Tracked kWh Savings ^(a)	% of Tracked kWh Savings
Very Small (0-19 kW) & Small (20-99 kW)	852	571	114,367,764	15%
Medium (100-499 kW)	1,581	996	158,262,728	21%
Large (500+ kW)	1,203	608	477,318,774	63%
Missing customer size	350	278	11,392,983	1%
Total	3,986	2,453	761,342,249	100%

a. This table summarizes participation data that has been “cleaned” specifically for the process evaluation. It should not be construed as the final tracked savings used for impact evaluation purposes.

Previous Process-Related Recommendations for the SPC Program

Table 2-4 shows the previous process evaluation recommendations for SPC for 2002, 2003, and 2004-2005. Of the 10 recommendations, 5 were presented in more than one evaluation report. All of the recommendations that occur more than once involve technical documentation and review of applications. In particular, these recommendations suggest more technical support and consistent application requirements for complex projects.

Table 2-4: Process-Related Recommendations of Prior Evaluations – SPC

#	Recommendation	Program Year		
		2002	2003	2004-2005
1	Continue successful program characteristics (e.g., maintain streamlined application and M&V processes)	X		
2	Continue to focus on industrial process and HVAC projects. Majority of incentives should be for non-lighting projects. Encourage and promote industrial participation. ^(a)	X		
3	Project installations should occur by six months following close of program year.	X		
4	Consider increased technical documentation for larger projects		X	X
5	Consider a stronger application affidavit statement on customer operating hours and characteristics of equipment		X	X
6	Increase consistency of the review approach and documentation requirements for recurring complex projects		X	X
7	Provide/require more technical support for complex projects		X	X
8	Attach reviewer documentation to the installation report		X	X
9	Tracking system improvements for consistent data entry ^(b)			X
10	Improving program administrative processes, including streamlining the application process, improving communication with trade allies re: availability of program funds, and use in-house reviewers			X

a. While this table summarizes the SPC program evaluation recommendations, the recommendation to focus on industrial process projects was also recommended in the 2004-2005 evaluation of NRA.

b. Tracking system improvements were also suggested in the 2002 and 2004-2005 NRA evaluations.

2.4. Audit Services (Nonresidential Audit)

The 2006 – 2008 BIS Program provided audit services similar to the Nonresidential Audit (NRA) program in previous program years. This component of BIS is intended to provide customers with the information needed for implementing cost-effective energy efficiency equipment upgrades and sustainable operational changes. As a result of the audit process, SCE provides customized recommendations for cost-effective energy efficiency improvements. For larger and medium sized customers, onsite audits are conducted by SCE or a third-party implementer. For smaller customers, audits may be conducted onsite, or the customer can complete a survey via telephone or online.

Financial incentives are available to customers or their consultants/contractors with prior approval. Incentives cover up to 75% of the installed project cost, not to exceed 100% of the incremental cost, or a total of \$1.5 million – whichever is less.

Energy savings for this component of BIS were claimed on a per-audit basis only if an implemented energy efficiency project was the direct result of an audit and only if financial incentives through another program were not awarded. If appropriate, additional assistance was provided to audit participants to implement an energy efficiency project. Such assistance could include equipment specification, system design, and contractor/vendor referrals.

Nonresidential Audit Participation Data

To characterize program activity and develop sample designs for the customer data collection efforts, EMI analyzed program-tracking data and other relevant data associated with participant sites provided by SCE. The raw NRA program database provided to EMI included 13,363 observations, where one observation represents one audit. EMI removed observations with problematic contact information, erroneous customer numbers, etc. The cleaned NRA database included 13,305 observations, or audits, that were conducted at 13,078 customer sites. The total tracked savings (at the time of this data extract) is 120,935,672 kWh. Table 2-5 summarizes NRA participation data by primary market segment and customer size category. Per-audit tracked kWh savings are based upon corresponding DEER values for the appropriate demand use category. Thus, the Sum of Tracked kWh Savings should equal the DEER value multiplied by the number of observations (audits) in each category. Most of the reported savings from the NRA program component were attributable to commercial (80%) and medium-size (71%) customers.

Table 2-5: Summary of NRA Participation Data by Primary Market Segment and Customer Demand Use Category

Primary Market Segment	# Observations	# Sites	Sum of Tracked kWh Savings ^(a)	Tracked % of kWh Savings
Commercial	11,329	11,218	96,560,303	80%
Industrial	1,912	1,796	23,501,666	19%
Agricultural	64	64	873,703	1%
Total	13,305	13,078	120,935,672	100%

Demand Use Category	# Observations	# Sites	Sum of Tracked kWh Savings ^(a)	Tracked % of kWh Savings
Very Small (0-19 kW) & Small (20-99 kW)	8,162	8,127	23,743,258	20%
Med (100-499 kW)	4,570	4,409	86,363,860	71%
Large (500+ kW)	573	542	10,828,554	9%
Missing customer size	-	-	-	0%
Total	13,305	13,078	120,935,672	100%

- EMI used the variable "GrossKwhUnit" variable for this table. This variable is populated with the same kWh savings value for all customers in the same demand use segment (kWh savings variance is 0 within each demand segment strata).
- This table summarizes participation data that has been "cleaned" specifically for the process evaluation. It should not be construed as the final tracked savings used for impact evaluation purposes.

Process-Related Recommendations of Prior Evaluations of the Nonresidential Audit Program

Table 2-6 shows recommendations from process evaluations of NRA in 2002, 2003, and 2004-2005. Of the 17 process-related recommendations, 9 were presented in more than one evaluation. These recommendations focused on tailoring the types of audit reports to the specific type of customer, emphasizing remote audits for smaller customers, improving marketing and using the audit to market the incentive programs, updating the program tracking system, allowing more frequent audits, and increasing emphasis on gas appliances. One recommendation occurred for all three evaluations; this

recommendation called for increasing follow-up efforts for NRA participants, although each of the three different evaluations suggested focusing on a different sub-segment.

Table 2-6: Process-Related Recommendations of Prior Evaluations – NRA

#	Recommendation	Program Year		
		2002	2003	2004-2005
1	Strengthen link between audit and incentive programs. Consider requiring audits for all Express Efficiency applications.	X		
2	Medium and large customers prefer more customized, site-specific, and technically sophisticated reports with equipment retrofit information.	X	X	
3	Emphasize low- and no-cost measures, and just more cost-effective measures in general, to small and very small customers.	X	X	
4	Outreach efforts to small customers should emphasize remote audits (2002, 2003). Remote audits should be continued (2002).	X	X	
5	Increase follow-up efforts (HTR customers in 2002, large customers in 2003, especially very small/small customers in 2004-2005)	X	X	X
6	Utilities need a more complete and consistent tracking system (electronic tracking system suggested in 2004-2005) ^(a)	X		X
7	Utilities should consider additional marketing; test and verify the marketing channels that are most effective (2002). Increase marketing, possibly creating a website “hub” for info & services. (2004-2005).	X		X
8	For smaller customers, deliver the audit report during the site visit, and provide a filled-in Express Efficiency application when appropriate		X	
9	Small customers need education information and measures ranked by cost to bottom line. Larger customers need measures ranked by ROI.		X	
10	Examine customer perceptions of audit usefulness		X	
11	Use audits as marketing opportunity to raise awareness of the incentive programs. ^(b) Maximize EE equipment adoptions and Express participation for smaller customers (e.g., provide list of contractors during site visits)		X	X
12	Determine why audit participants are installing efficiency measures w/o incentives.			X
14	Increase audit emphasis on cooling, & water heat recommendations			X
15	Emphasize industrial process recommendations in audit reports for medium/large customers ^(c)			X
16	Diversify report recommendations and determine whether lighting recommendations are more effective than other end-uses.			X
17	Collaborate with Community-Based Organizations, to overcome barriers with finding qualified contractors. ^(d)			X

a. Tracking system improvements were also suggested in the 2004-2005 SPC evaluation.

b. Recommendation to use audits as a marketing opportunity was also made in the 2002 Express Efficiency evaluation.

c. Focus on industrial process projects was also recommended in the 2002 evaluation of SPC.

d. Collaboration with CBOs was also recommended in the 2002 evaluation of Express Efficiency.

2.5. Pilot with The Southern California Gas Company

The majority of the resources of this process evaluation were devoted to examining the Express Efficiency, SPC, and NRA components. However, the evaluation team reserved a very small portion of the study to summarize a pilot program with the Southern California Gas Company (The Gas Company). As outlined in the 2006 – 2008 PIP for the BIS program, a collaborative pilot program between Southern California Edison and Southern California Gas was implemented in 2006 to deliver joint electric/gas audits to 500 customers. The objective of this pilot was to determine how such a program could be developed into a full-scale program component over the three-year program cycle. The pilot was used to determine whether delivering the joint program would be cost effective and whether any future training requirements were necessary.

Little data and information exists about this pilot program, primary because the utilities opted to discontinue the pilot after it reached the goal,¹⁰ long before this process evaluation began and since the SCE staff that were involved with the program have left SCE's energy efficiency division. Thus, there is little institutional knowledge about the pilot program and thus little opportunity to examine its delivery as part of this process evaluation.

EMI interviewed the SCE pilot program manager to understand the context behind the decision to discontinue the pilot. The primary reasons for this decision are threefold:

1. First, the identification of a target market for the pilot for which there was sufficient potential for both electric and gas savings was difficult. Markets identified by SCE were not considered fruitful for The Gas Company, and vice versa. The utilities agreed to target the restaurant sector; they further limited the pilot to small and/or privately owned establishments because restaurant chains are managed-accounts and more difficult to serve through the pilot initiative.
2. Second, the SCE auditors were not trained to inspect gas equipment and the utilities outsourced the audits to a third party contractor. While this is a reasonable function to outsource, this decision distanced SCE from its customers, which is not ideal from a customer service perspective, particularly for a pilot program.
3. Third, the protection of proprietary customer data created restrictions on the development of the audit reports and the audit information that could be provided back to each utility. SCE received data on the audited electric measures and The Gas Company received data on the gas measures, but neither utility received the comprehensive audit results. The bifurcation created distance between SCE and The Gas Company with respect to the level of collaboration and synergies that would normally be a key element of a joint program.

Because the decision to discontinue the pilot was made long before this process evaluation began, it was not covered by this process evaluation study. The remaining sections of this report pertain only to the three primary BIS components summarized above (Express Efficiency, SPC, and NRA).

¹⁰ According to SCE, 570 audits were conducted through this pilot program.

2.6. Analysis of Cross-Participation Across BIS Program Components

In addition to the analysis of participation data for each program components presented in the preceding subsections, the analysis of BIS program tracking databases included examination of cross-participation across BIS components. Specifically, EMI sought to understand the extent to which customers participated in more than one program component during the 2006 – 2008 program cycle (January 1 through June 2008). This analysis was necessary to understand participation trends for both survey development and to examine the extent that SCE integrated the BIS components as intended. This analysis, in particular, examined the extent that NRA participants also participated in either the Express Efficiency or SPC programs. One indication of the success of such integration is the percentage of NRA customers that also participated in one of the incentive programs.

Table 2-7 summarizes the overlap of customer participation across the NRA, SPC, and Express Efficiency programs. As shown, the majority – 11,470 of the 13,370, or 86% – of the BIS customers participated in either the NRA or the Express Efficiency program (not both). Table 2-8 provides details regarding overlap between the NRA program and the SPC and/or EXP programs by customer demand use category. Key results are enumerated below:

- 12% of the NRA participants (customers) also participated in either Express or SPC, or both (1,187 of 9,797 customers).
- More customers participated in incentive programs alone, rather than participating in the NRA and an incentive program.
- Larger customers exhibited greater incidence of participation overlap than smaller customers:
 - 42% of the large sites that received an audit also participated in one of the incentive programs
 - Less than 2% of very small sites that received an audit also participated in an incentive program.

Table 2-7: Overlap of Customer Participation across Express Efficiency, SPC, and NRA

Program(s)	Customers ^(a)	Customer Sites ^(b)
NRA only	8,610	11,983
NRA & SPC	223	232
NRA & EXP	822	761
NRA & EXP & SPC	142	102
EXP only	2,860	4,985
SPC only	497	1,634
SPC & Express	216	485
Total:	13,370	20,182
Total any NRA:	9,797	13,078
Total any SPC:	1,078	2,453
Total any EXP:	4,040	6,333

Detailed in
Table 2-8
below.

- a. Overlap could be across different locations within the same company.
b. Overlap is for the same location.

Table 2-8: Overlap of NRA Participation with SPC and/or Express Participation, by Customer Demand Use Category

Program(s)	Demand Use Category								TOTAL	
	Very Small (0-19 kW)		Small (20-99 kW)		Medium (100-499 kW)		Large (500+ kW)			
	# Sites	%	# Sites	%	# Sites	%	# Sites	%	# Sites	%
NRA only	5,417	98%	2,356	91%	3,892	88%	318	58%	11,983	92%
NRA & SPC	3	0.1%	31	1%	76	2%	122	22%	232	2%
NRA & EXP	93	2%	201	8%	404	9%	63	12%	761	6%
NRA & EXP & SPC	0	-	15	0.6%	42	1%	45	8%	102	0.8%
Total (any NRA)	5,513	100%	2,603	100%	4,414	100%	548	100%	13,078	100%

There are several important points to note about the distribution of NRA participants in Table 2-8. Most notably, the number of Very Small and Small audited sites (5,513 and 2,603, respectively) is considerably higher than one would expect. Historically, on-site facility audits have been targeted to medium and large facilities with which the highest energy savings potential are associated. The 2006 – 2008 BIS PIP explicitly states that the program will “deliver the audit service to business customers ranging from very small to large;” opening the NRA to smaller customers was a new program feature for the 2006 – 2008 program cycle.

Even more startling about Table 2-8 is the fact that nearly all (98%) of the Very Small and 90% of the Small NRA participants did not participate in either the Express or SPC during the 2006 – 2008 program cycle. Considering that audits were not conducted for smaller facilities prior to this program cycle, it became apparent to both SCE and the evaluation team that little was known about these smaller NRA participants, and a research need arose to understand this particular customer segment more closely. Thus, EMI and SCE jointly agreed that the sample of in-depth interviews with program participants would consist of the Very Small and Small, NRA-only participants. The results of these in-depth interviews are presented in Section 4.

3. PROCESS EVALUATION APPROACH

3.1. Overview of Approach

An overview of the process evaluation approach developed for this project is depicted in Figure 3-1. This figure illustrates how *specific research objectives* relate to the *overarching research goals* and the *specific research and data collection activities* that EMI implemented to achieve these objectives. The left portion of Figure 3-1 presents five overarching goals of this research. These researchable questions are consistent with typical process evaluations of utility energy efficiency programs, in that they seek to understand and document the effectiveness of program operations and delivery mechanisms. These key research questions are intended to address specific issues identified by both SCE and EMI during the development of this research plan:

- Did the BIS Program achieve its goals, as stated in the Program Implementation Plan?*
- Did SCE improve the operational efficiency of the BIS portfolio?*
- Was the BIS program delivery effective and successful?*
- Did SCE successfully integrate BIS services, and to what extent were BIS programs coordinated with other programs?*
- Did the 2006 – 2008 BIS reduce barriers to increased energy efficiency?*

The process evaluation approach relating to each of these objectives is discussed briefly below.

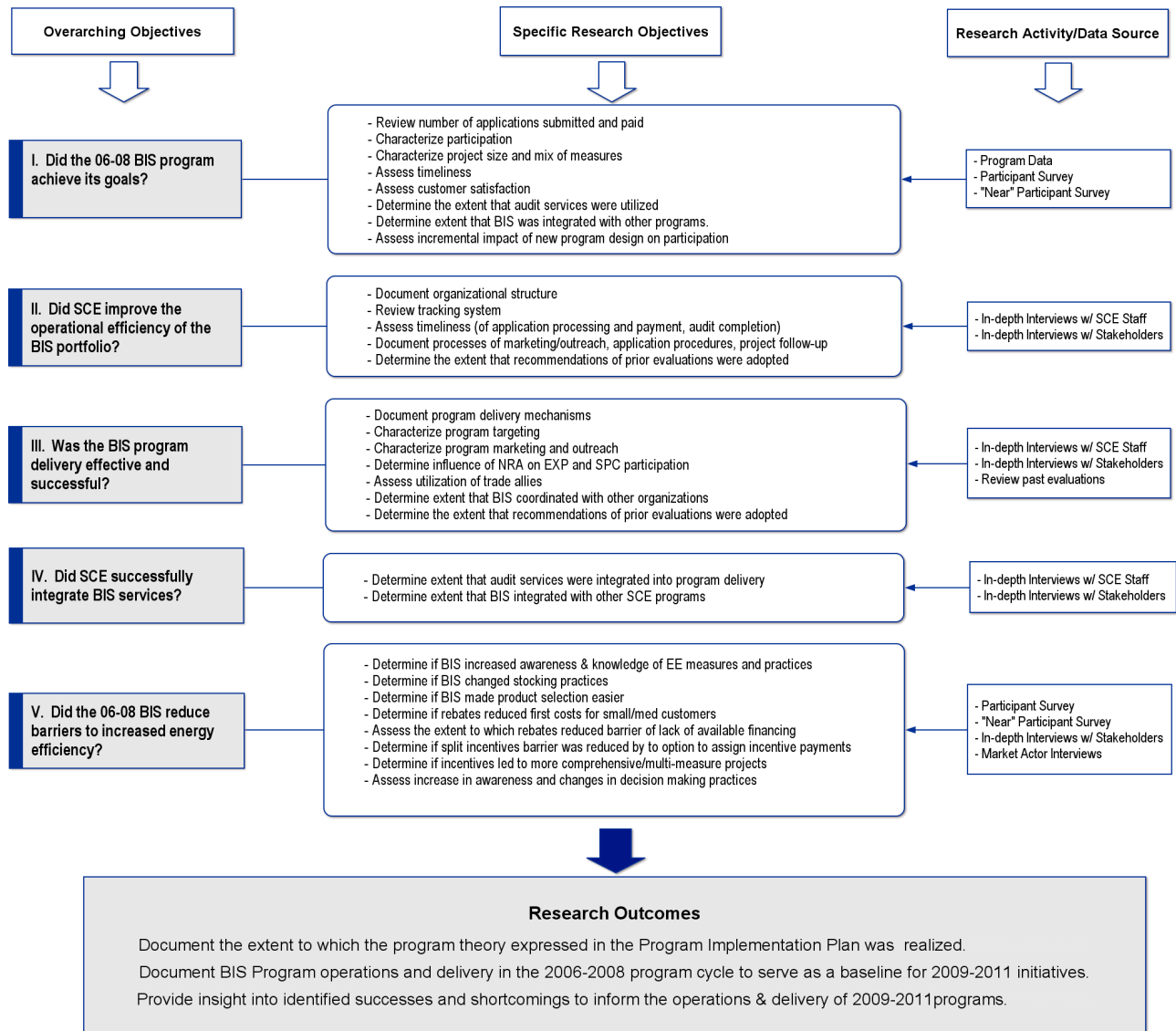
Achievement of Program Goals

In the context of this research, program goals refer to “non-impact” goals relating to program delivery and operations. As noted in Figure 3-1, specific objectives to assess achievement of program goals include:

- Review number of applications submitted and paid
- Characterize participation (customer size, business type)
- Assess timeliness (of application processing and payment, audit completion)
- Assess customer satisfaction
- Assess incremental impact of new integrated program design on program enrollment

These program goals were culled from the Program Implementation Plan, which will be referenced throughout EMI’s research.

Figure 3-1: Overview of the Process Evaluation Objectives and Research Activities



Operational Efficiency of the BIS Program

Operational efficiency refers to the internal processes associated with program delivery – how the “internal cogs” work together to provide valuable products and services to SCE’s customers. To assess the operational efficiency of the BIS Program, the evaluation team had originally intended to examine the following:

- SCE’s internal organizational structure and how various individuals and groups interacted to provide energy efficiency services to SCE customers,
- Program tracking system(s) and information management,

- Timeliness (e.g., of application processing and payment, audit completion),
- Internal processes and communications associated with marketing and outreach, lead generation, application procedures, rebate processing, and project follow-up, and
- The extent that recommendations of prior evaluations were adopted (and if not, why).

However, as noted previously, most of these objectives became less of a priority for this process evaluation because of the restructuring within SCE's energy efficiency division and the fact that SCE commissioned EMI to conduct a separate, more detailed business process review and optimization study.

Delivery of the BIS Program

In the context of this research, program delivery refers to the ways in which “the program” (i.e., the activities of the SCE staff and the contractors and vendors working on behalf of SCE) engages and interacts with the target market(s) and other market actors to identify, recruit and provide services to program participants. The assessment of program delivery included the following:

- Document program delivery mechanisms,
- Characterize program targeting,
- Determine influence of NRA on Express Efficiency and SPC participation,
- Assess utilization of trade allies,
- Determine extent that BIS coordinated with other organizations (community-based organizations, etc.), and
- The extent that recommendations of prior evaluations were adopted (and if not, why?).

The information to fulfill these objectives was gathered primarily from in-depth interviews with SCE staff and key stakeholders.

Integration of the BIS Programs with Other Initiatives

An underlying assumption within this new program design is the notion that increased integration will lead to increased impacts in the market. Two key research objectives relating to integration were to:

- Determine the extent that the itemized and calculated/customized elements of BIS utilized audit services to increase program enrollment, and
- Determine the extent that BIS program delivery and services were integrated with other programs, such as the Emerging Technologies Program and SCE's Demand Response initiatives.

This process evaluation sought to understand the integration of the BIS portfolio from a process perspective – internally within SCE and externally among other programs and organizations. In reviewing the program tracking data, EMI investigated evidence of increased integration, as reflected in customer progressions from audit to project implementation (summarized previously).

Impact of the BIS Programs on Barriers to Energy Efficiency

As stated in the PIP, the BIS Program was intended to reduce specific barriers to increased energy efficiency in SCE's commercial and industrial sectors. Research conducted to support this process evaluation was intended to accomplish the following:

- Determine if the BIS programs increased awareness and knowledge of energy efficient measures and practices,
- Determine if the BIS programs induced changes in equipment vendor stocking practices,
- Determine if the BIS programs made product selection easier (for both customers and contractors),
- Determine if rebates reduced first costs for small and medium customers,
- Assess the extent to which rebates reduced the barrier of lack of available financing,
- Determine if the split incentives barrier was reduced by the option to assign incentive payments,
- Examine the extent that financial incentives led to more comprehensive, multi-measure projects, and
- Assess the increase in awareness and changes in decision-making practices (of both end users and contractors).

Information and data to examine these objectives were obtained from customer surveys and in-depth interviews with program stakeholders and key market actors.

Table 3-1 summarizes all of the data collection efforts that supported this process evaluation. Each is discussed briefly below.

Table 3-1: Summary of Primary Data Collection

Data Source	In-Depth Interview Sample Size	Telephone Survey Sample Size
Program Participants	50	301
"Near" Participants	30	0
SCE Staff & Third Party Reviewers	14	0
Market Actors and Key Stakeholders	60	0
Total	154	301

Participant Surveys. The participant surveys were the primary data source for much of this process evaluation. The participant surveys obtained customer feedback and insight on customer experiences with the BIS Program. Participants reported their satisfaction with the program, the effectiveness of the program in promoting participation in Express Efficiency and SPC, and offered recommendations for program improvement.

In-Depth Interviews. In-depth interviews with a variety of individuals were conducted to provide added value from having a more in-depth conversation as opposed to a structured telephone survey. The evaluation team interviewed representatives of the following categories:

- **Very Small & Small NRA-only Participants.** As discussed previously, there is little known about the NRA participant population of the smaller size categories. The high percentage of NRA participants who did not participate in an incentive program warranted further investigation.
- **Near Participants.** For the purposes of this study, a “near” participant is a customer that applied for but did *not* receive financial incentives or services offered through SCE’s BIS Program during the 2006 – 2008 program cycle. Interviews were conducted with this customer group to gain a more in-depth understanding of why they applied for but did not receive program services and the implications of these experiences on the effectiveness of program operations and delivery.
- **Market Actors and Key Stakeholders.** The evaluation team interviewed a diverse sample of representatives of organizations outside of SCE that play an active role in program marketing, outreach, and/or delivery, or that represent a business or organization that is targeted by the BIS programs. Stakeholders include equipment vendors, installation contractors, local government agencies, community-based organizations, manufacturers, and trade associations.
- **SCE Staff.** Interviews were conducted with various SCE staff (primarily program managers) early in the process evaluation to identify key research questions and develop a better understanding of the BIS program, overall.
- **Third-Party Reviewers.** Interviews were conducted with third-party engineering review firms working under contract with SCE to review SPC incentive applications. The objective of these interviews was to gain insight into the application review process, get a sense of program satisfaction, and solicit suggestions for program improvements.

4. THE CUSTOMER PERSPECTIVE

Research was undertaken with various customer groups to gauge participant satisfaction, barriers to participation, and how the program's integration into BIS has affected participant experiences. In particular, this research sought to learn more about missed opportunities, including customers that participated in NRA but did not go on to participate in one of the incentive programs, as well as those who initiated applications but for whatever reason did not complete the rebate process. EMI collected feedback from three groups of customers, using both surveys and in-depth interviews:

- **Surveys with Program Participants.** The central component of this process evaluation was a large-scale survey of SCE customers who had participated in NRA, Express Efficiency, and/or the SPC program.
- **In-Depth Participant Interviews with Very Small/Small Audit-Only Customers.** To supplement the participant survey effort, EMI staff conducted in-depth interviews with customers who had participated in the Nonresidential Audit but did not continue to participate in Express Efficiency or SPC. The sample consisted of only customers in the very small and small customer demand use categories.
- **In-Depth Interviews with Express-Efficiency Near-Participants.** EMI completed in-depth telephone interviews with 30 customers considered to be “near participants” in the Express Efficiency element of BIS.¹¹ By “near-participant,” we are referring to a customer who submitted an application for incentives, yet never completed the program participation process.

From speaking with a variety of customers, including BIS participants and near-participants, EMI's research uncovered three primary findings:

- **Integration of the three BIS program components appears to be low.** The Audit does not appear to be systematically used to market Express Efficiency and SPC, as customer awareness of the incentive programs is low. Furthermore, our research shows that audits are not always customer-initiated, and are often paired with the Direct Install program for very small customers, which may result in low retention of and low importance placed on audit recommendations by the customer. This in turn impacts the implementation of audit recommendations.
- **Cost and application complexity are big challenges for customers.** Many customers do not go on to participate because for one reason or another, the program does not feel worthwhile to them. Streamlining the application process and providing optimized financial incentives/financing assistance could help customers feel that the program is worthwhile.
- **Consistent availability of assistance and follow-up from SCE is a key to program success.** Assistance and follow-up from SCE helps customers understand why applications may have been rejected and helps them understand what the next steps are for participating in the programs after they have received an audit. In general, customers who were satisfied had good contacts at SCE to help them through the process, while those who were dissatisfied did not feel like they had access to assistance from SCE. Our research shows that customers are interested in saving energy and saving money, and they want more information and assistance to help them do so.

¹¹ Initially, EMI also intended to conduct interviews with near-participants of the Standard Performance Contracting Program (SPC); however, SCE did not provide EMI with contact information for these customers.

The remainder of this section provides a detailed description of findings for each of the three data collection efforts. First, we discuss the results of the participant survey, followed by the participant interview results and finally, the near-participant interview findings. Details regarding the data collection objectives, sample data, sampling plans, and respondent characteristics can be found in Appendix A. All data collection instruments are included in Appendix B.

4.1. The Overall BIS Participant Perspective

This section provides a characterization of customer participation experiences, including customer satisfaction, barriers to participation, and impact of program on customer awareness.

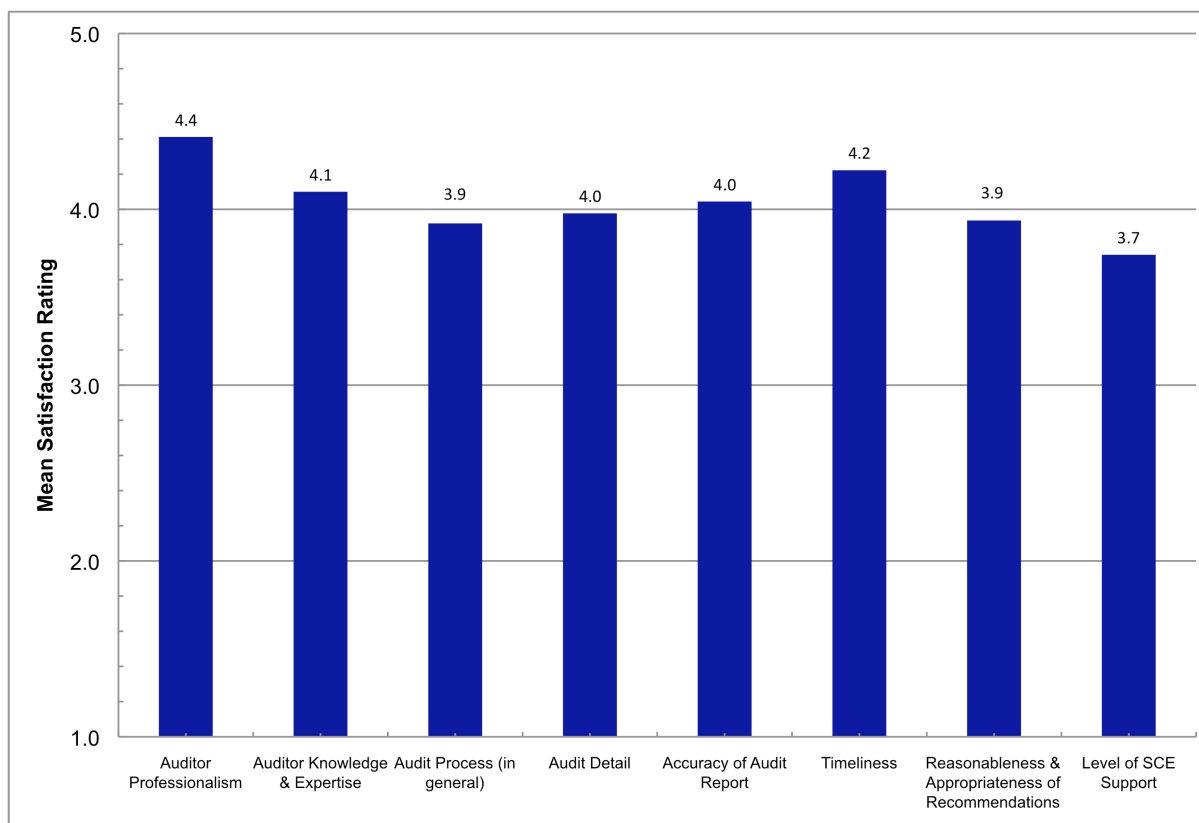
Participant Satisfaction

This section describes participants' satisfaction with the BIS program offerings. Understanding the areas of program delivery with which customers are satisfied or dissatisfied will give SCE a sense of which program components are working well and which could use improvement. This also provides valuable feedback for program staff implementing the program.

First, a characterization of satisfaction with the NRA will be provided, followed by a description of satisfaction with the two incentive components, Express Efficiency and SPC.

Satisfaction with the Nonresidential Audit

Nonresidential Audit (NRA) participants were asked to report their satisfaction with a number of components of the audit process. Each rating was made on a scale of 1 to 5, with 1 meaning "very unsatisfied," and 5 meaning "very satisfied." As shown in Figure 4-1, NRA participants were most satisfied with the professionalism of the auditor and least satisfied with the level of support provided by SCE. However, even the lowest rating was 3.74, meaning that on average, participants felt positively about the level of support provided by SCE. Still, this suggests that perhaps SCE could improve the level of support provided to their NRA customers.

Figure 4-1: NRA Participants' Satisfaction with the Audit

Satisfaction with Professionalism of the Auditor

To understand what was about the auditor that they found so satisfactory, participants who gave a rating of 4 or 5 were asked to provide an explanation of their rating. Participants commented on the technical expertise, level of detail, and the ability to tailor the audit to customers' specific business. This latter finding suggests that the program has been able to address the recommendation from previous NRA process evaluations to offer audits that are tailored to the customer. Examples of customer comments are provided below:

"He had a lot of suggestions on the pumps we had and how to save energy by turning on and off some of the equipment."

"I was mostly satisfied or impressed that SCE sent an expert engineer who knew about our equipment and that his ideas were compatible with our equipment. He wasn't just stating general suggestions, but very specific ones."

"What she did was review all the information. She was very perceptive and reviewed ways we could be more efficient and ways that we could bring down usage."

Need for Feedback/Follow-up After Audit

Because the lowest mean satisfaction rating was in response to the support provided by SCE, paying attention to the explanations of those who gave a rating of “1” or “2” to this question may provide some insight into ways that satisfaction with SCE’s support can be improved. Participants who gave a “1” or “2” rating were asked to elaborate about why they were unsatisfied with the level of support provided by SCE. There were many comments about not getting any feedback or follow-up after the audit was conducted.

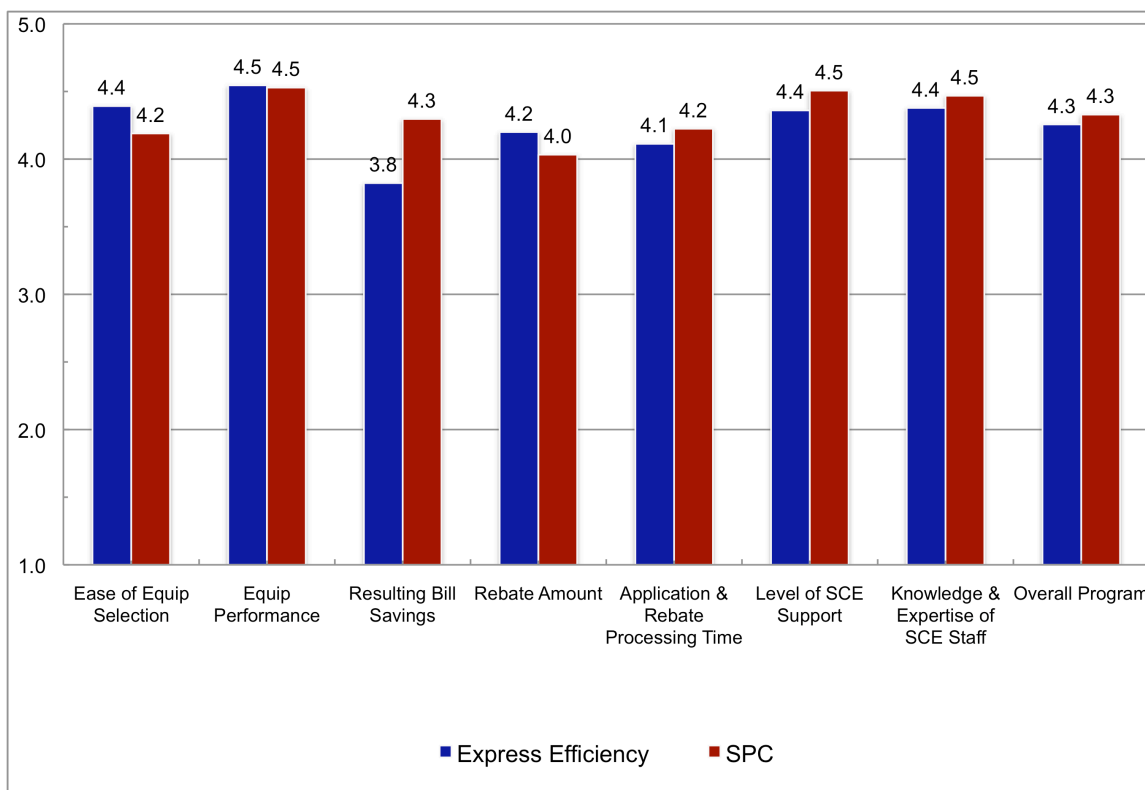
“I never got any feedback from them at all, he just checked my lights and left. I never heard from him again.”

“SCE never got back to me.”

“I think the audit explanation could be more in depth, they could have explained more about what the point of the audit was.”

Satisfaction with Express Efficiency and SPC

Participants of SCE’s Express Efficiency and SPC Programs were asked to report their satisfaction with various components of the incentive process. Each rating was made on a scale of 1 to 5, with 1 meaning “very unsatisfied,” and 5 meaning “very satisfied.” As shown in Figure 4-2, participants were most satisfied with the performance of the equipment that they selected for the project. Participants were also quite satisfied with the level of support from and knowledge/expertise of SCE staff. Express Efficiency participants were least satisfied with the bill savings they received from the installed equipment, while SPC participants were least satisfied with the rebate amount relative to the total project cost. Even so, the lowest mean rating was 3.8, suggesting that participants’ experiences were positive, overall.

Figure 4-2: Express Efficiency and SPC Participant Satisfaction

Barriers to Participation in Incentive Programs

Twenty of the sampled Audit participants said their companies had not implemented any of the audit recommendations. These respondents were asked to report the primary barriers their company faces in implementing the recommendations. As shown in Table 4-1, the primary barrier was financial, with respondents mentioning lack of financing and the cost of completing projects as preventing them from implementing the recommendations.

Clearly, the availability of incentives is an important factor when customers consider making the recommended changes resulting from the audit. Even with current incentive levels, it appears that some customers find the up-front financial cost too burdensome.

Table 4-1: Reasons for Not Implementing Any Audit Recommendations

Barrier	Frequency ^(a)	Percent
Lack of financing/Cost	12	60%
Don't believe we'll see the savings	2	10%
Company moving/ closing facility	2	10%
Only replace equipment at time of failure	1	5%
Never received recommendations	1	5%
Made behavioral changes instead	1	5%
Recommended changes were undesirable	1	5%
Don't Know	2	10%

a. Multiple responses were accepted. A total of 20 respondents reported that they had not installed any measures identified in their audit recommendations.

Forty-two of the sampled NRA participants reported that they had implemented at least some of the audit recommendations. Almost 40% said their company had purchased and installed the recommended equipment *without* seeking incentives from SCE.¹² When asked why they had made the recommended changes without seeking incentives, respondents gave a variety of reasons.

- For some, applying for incentives was someone else's decision or responsibility.
"We have a maintenance company who takes care of that."
- Some said the equipment did not qualify for rebates, while others said that the program had expired.
"We were already committed to doing it and incentives weren't available."
"The timetable on the website said it was too late to apply."
"I was disapproved for the program. I have 5 units, and as far as billing, I have 3 separate billings for the company. One was approved and the others were not."
- Others said that applying for incentives was not worthwhile.
"Because we had to replace the equipment too quickly and couldn't wait to apply."
"Because it was done on an as needed basis, we did not feel it was worthwhile."
"Wasn't worth the delay. There was a time delay in getting some of the equipment."
"I think it was too much trouble and we already had gotten this for free. The free installation was the incentive to do it."
- One respondent said that they did not know about the rebates/incentives that are available.

¹² Responses were missing for three respondents, and one respondent indicated "Don't Know" in response to this question.

Potential Barriers Associated with the Application Process

Another potential barrier to participation that was alluded to previously includes difficulties with the application process; if the application process is too burdensome, viewed as not worthwhile, or simply too complicated, participants could be discouraged from applying for incentives. Thus, we asked SPC and Express Efficiency participants to provide feedback on the application process.

We asked SPC and Express Efficiency participants if they or the project sponsor experienced any unreasonable delays in preparing the required documentation. Fewer than 10% of respondents noted that they had experienced such delays. Although the proportion of respondents who experienced unreasonable delays is relatively low, it is important to understand the source of these delays in order to minimize negative customer experience.

- Six (8%) Express Efficiency participants had experienced “unreasonable” delays in preparing the program application
- Express Efficiency participants commented on the difficulty of the forms, calling SCE to get help with the forms, and never hearing anything from SCE in response to their application.

“The instructions were written at a technical level above my grasp.”

“Too long of a form, too detailed.”

“I called the lady at Edison and it was really easy. I wasn’t sure how to answer some of the questions, so I called to find out.”

“They required certain names and part numbers of the equipment.”

“I sent something to them and never got an answer, so I never got the rebate check.”

- Eight (5%) SPC participants had experienced what they considered to be “unreasonable” delays in preparing the application.
- SPC participants noted a variety of difficulties, including difficulties getting help from SCE, knowing whom to contact at SCE, or even just getting the correct forms.

“The savings were calculated by SCE and that took some time for us to receive.”

“I experienced delays in contacting and setting up appointments with my rep from SCE. It took about 2 months to get contact and another month before everything was done.”

- More than one SPC respondent noted that the actual rebate was substantially smaller than the original estimate, and their conclusion was that the rebate amount was not worth the substantial effort it took to complete the application process.

“We had a hard time getting information on how to fill out the application. Then, with the savings, they said we’d get back close to \$2000, but we ended up getting only about \$100. The person from SCE had a death in the family, couldn’t get answers from anyone, and it ended up delaying the project.”

“At the onset, we had 4 air conditioners that needed to be replaced. I was considering to replace them and I asked Edison if they had any programs. In the beginning, Edison thought they would pay \$1200 if I would use the highest SEER (seasonal energy efficiency rating). My maintenance man, had to schedule 2-3 meetings for program personnel to confirm before and

after installation. In the end, we received \$250. My conclusion was the program was not worth our time to get involved with.”

It is also worth noting that these comments are from those who completed participation in the programs. An unknown amount of customers who may have had similar experiences may have discontinued their participation in the programs. This possibility heightens the importance of understanding the source of difficulty for those who experienced unreasonable delays in preparing the required documentation. Results of interviews with “near-participants” of the Express Efficiency program, presented later in his chapter, show that application difficulties and rejection by SCE are in fact responsible for discontinuation of their participation in the program.

Incentive Program Awareness

Table 4-2 shows the responses provided when we asked participants of Express Efficiency and SPC how they first learned about the financial incentives available through the program. The majority of respondents said they learned from an SCE representative. Others were informed by contractors or another third party, or from friends or co-workers. Worth noting is that none of the respondents said that they heard of the program via SCE’s Energy Audit.

Table 4-2: Program Awareness: Express Efficiency and SPC Participants

Response^(a)	Frequency	Percent
Informed by SCE representative	162	62%
Informed by contractor/ESCO/A&E firm/Other 3rd party	18	7%
Word-of-mouth from friends, family, co-workers	15	6%
Respondent approached contractor/ESCO/A&E firm/Other 3rd party	11	4%
Utility brochure in mail	11	4%
Participation in previous years	7	3%
Manufacturer information/suggestion	7	3%
SCE’s website	7	3%
Other	6	2%
Don't Know/Refused	10	3%
Respondent approached utility concerning another matter	3	1%
Seminar/class at the Pacific Energy Center (PEC), ERC, or CTAC	2	1%
Seminar or training class sponsored by utility	1	<1%

a. Multiple responses accepted.

SCE representatives (including Account Executives and other staff) are obviously essential for customer awareness of the programs. It is important to ensure that NRA participants are being systematically informed about the incentive programs as well, which we examine next.

Integration of NRA with Express Efficiency and SPC

A primary goal of EMI’s process evaluation was to gauge how well the BIS programs are integrated. Although customers are free to participate in an incentive program without first receiving an audit, one reason for integrating the programs is so that those receiving an audit can more easily participate in the

incentive programs. For this reason, we examined how participants of the incentive programs learned about the program to see if they are being funneled from the Non-Residential Audit program, and we also examined whether NRA participants received adequate information about the incentive programs.

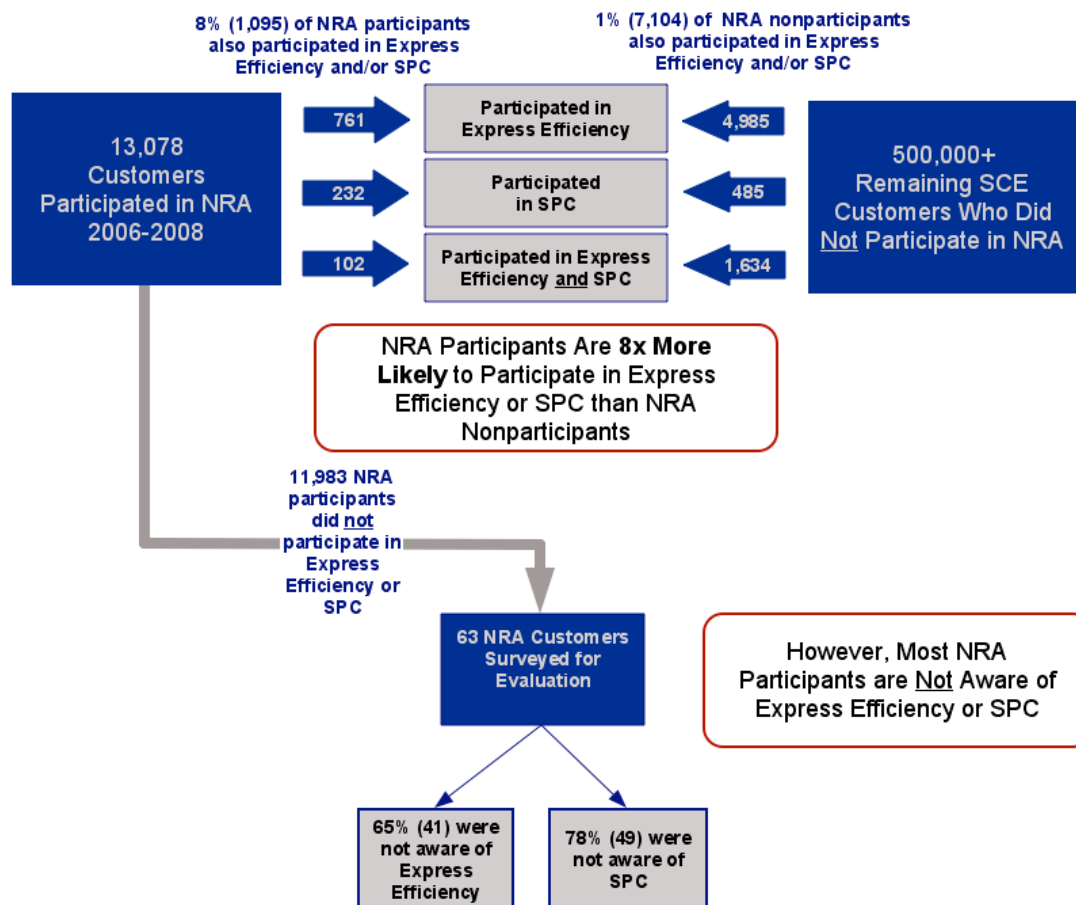
To gauge the success of the BIS program in raising awareness of the incentive programs, Express Efficiency and SPC, the evaluation team asked NRA participants two types of questions. First, we asked a free recall question, asking them to report any other programs or resources designed to promote energy efficiency. If they did not specifically mention Express Efficiency or and/or SPC, we asked cued recall questions that included the program names and descriptions.¹³

Figure 4-3 shows results of the participant survey showing NRA participants' awareness of Express Efficiency. Also shown is a summary of program cross-participation obtained from SCE's program data. There are two noteworthy findings depicted in the figure. First, the participation rate in the incentive programs for those who have had an audit is 8%, substantially higher than the participation rate of the general SCE customer base that have not had an audit, assuming this consists of about 300,000 nonresidential customers. Thus, it appears that the NRA is successful in increasing participation in Express Efficiency and SPC.

Second, the majority the NRA customers that were surveyed were not aware of SPC or Express Efficiency. Sixty-five percent of our respondents who had had an audit were not aware of SPC, and seventy-eight percent were not aware of Express Efficiency. *Thus, it appears that the greatest barrier to participation may simply be lack of awareness of the programs.*

¹³ For the cued recall questions, customers were asked if they were aware of SCE's Express Efficiency Rebate Program, described as follows: "This program offers rebates on the purchase and installation of qualifying equipment that improves the energy efficiency of your business. To qualify, the equipment must be on SCE's itemized measures list." We also asked customers if they were aware of SPC, described as: "This program offers customized financial incentives for the installation of high efficiency equipment or systems, including both common and more specialized equipment. Incentives are calculated based on the type of measure and the energy savings over a 12-month period."

Figure 4-3: NRA Participants' Awareness of Express Efficiency and SPC



Knowledge/Awareness of Energy Efficient Technologies

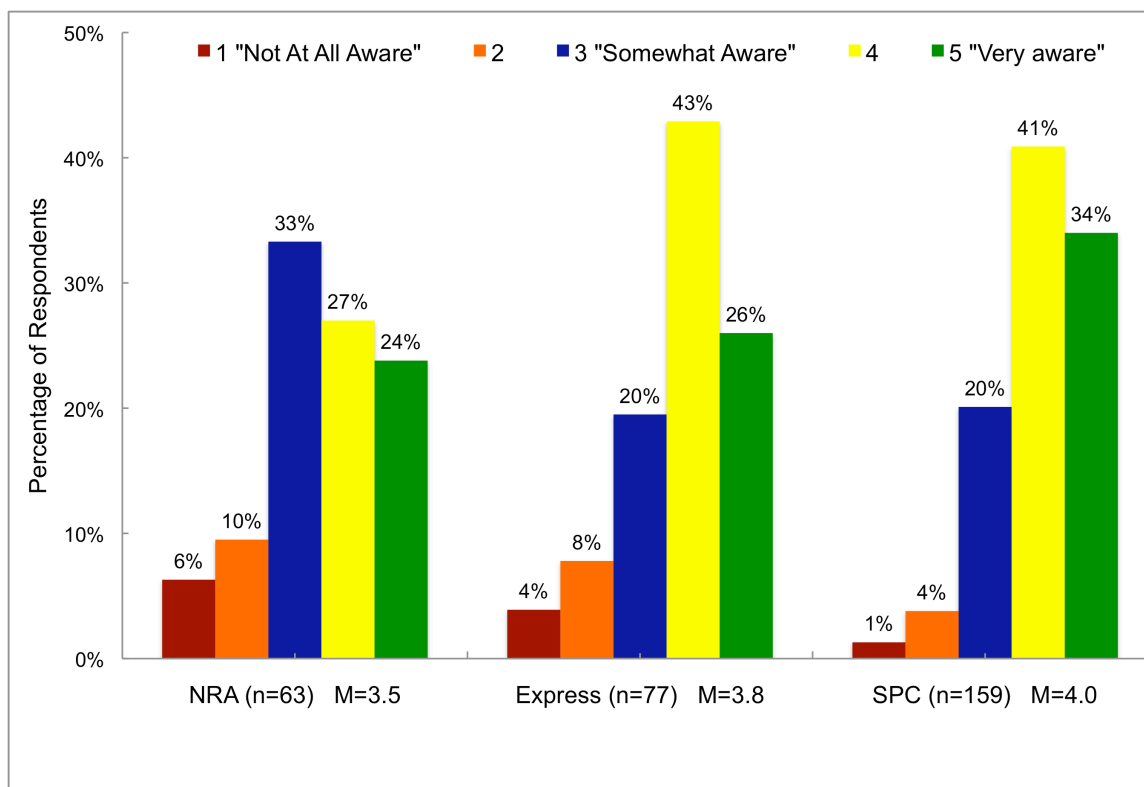
Another barrier to adopting energy efficient equipment and practices is awareness of energy efficiency opportunities. Thus, we sought to understand how successful the BIS programs are in increasing awareness of such opportunities.

Current Awareness of Energy Efficiency

When asked to report how aware they were of energy efficient equipment and practices for their business, on a scale of 1 to 5, with “1” being “not at all aware” and “5” being “very aware,” respondents gave an average rating of 3.9 and a median rating of 4.0. Overall, 9% of the survey respondents provided a rating of “1” or “2,” meaning they had no or very little awareness. Most participants (68%) gave ratings of “4” or “5,” meaning they felt that they had a good deal of awareness.

As shown in Figure 4-4, respondents' self-reported awareness of energy efficient equipment and practices varied by program, with NRA participants rating their awareness as significantly lower than SPC participants. A greater proportion of NRA participants gave lower ratings, while fewer NRA participants gave ratings of "4" or "5."

Figure 4-4: Self-Reported Awareness of Energy-Efficient Equipment and Practices



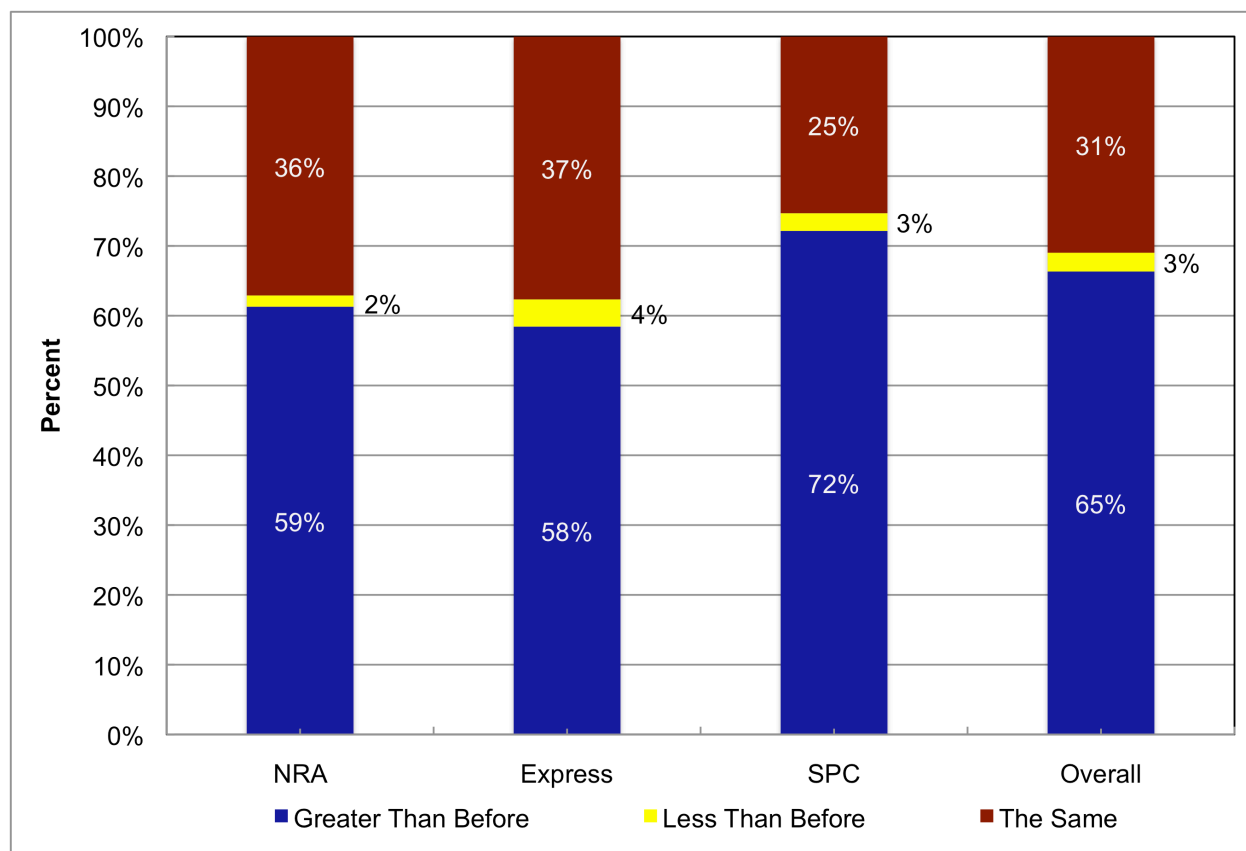
The mean rating for NRA participants was statistically significantly lower compared to that of SPC participants.

Awareness of Energy Efficiency Opportunities as a Result of Program Participation

Respondents were also asked to compare their current awareness of energy-efficient equipment and practices to their awareness before they participated in BIS. Figure 4-5 shows responses for participants of all three programs. Overall, 65% of respondents said their awareness was greater than before they participated in BIS. Increase in awareness was greatest for SPC participants, with 72% reporting that their awareness had improved since participating in the program.

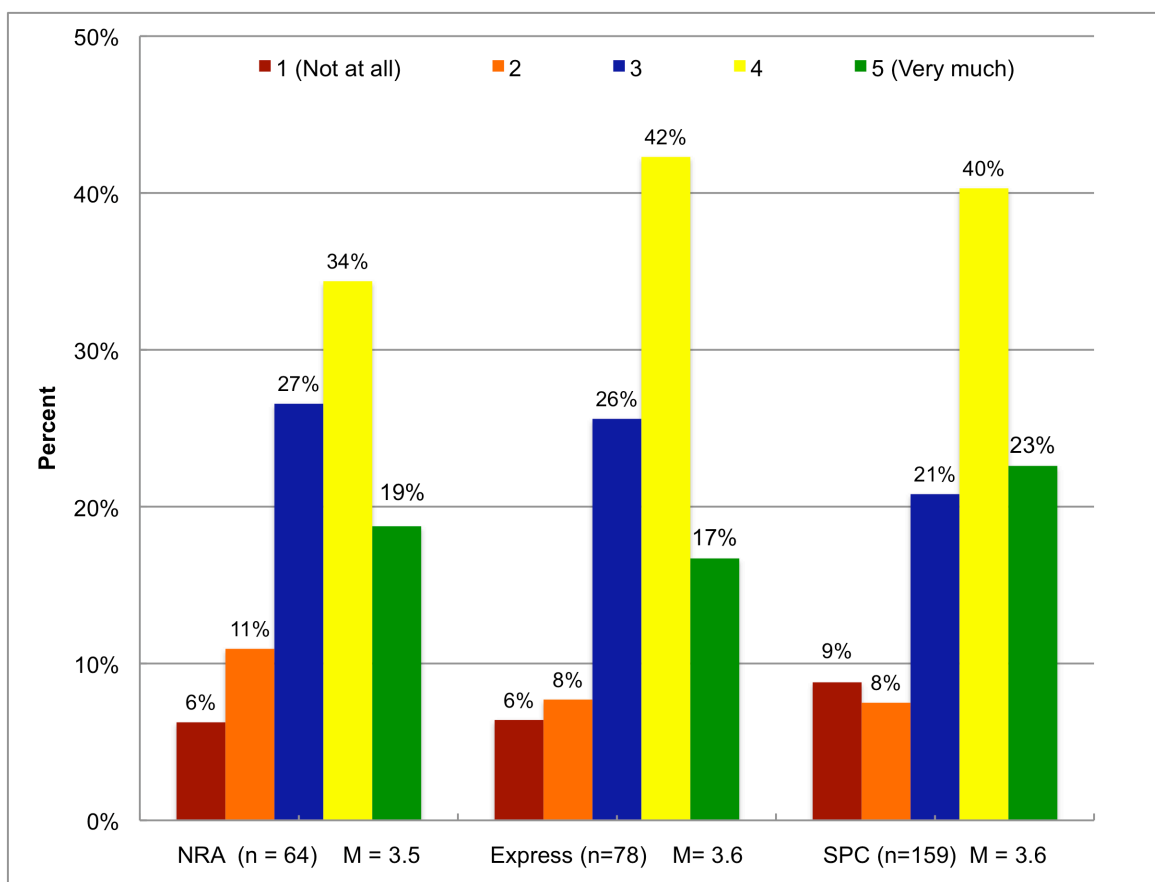
Overall, 31% said their awareness had not changed as a result of participating in BIS. From a program logic perspective, those most expected to learn about energy efficient equipment and practices as a result of the program are NRA participants, because the audit is primarily a service intended to provide information about improvements customers can make to improve the energy efficiency of their businesses. Thus, it is interesting to note that 36% of NRA participants said that their knowledge of energy-efficient practices and equipment was the same compared to before they participated in the program.

Figure 4-5: Self-reported Awareness of Energy-Efficient Practices After BIS Participation



When asked how much the audit or incentive program improved their knowledge of energy efficient technologies that would benefit their business, participants of all program components reported that the program improved their knowledge. Figure 4-6 shows the proportion of responses for all program components. The three programs seem fairly comparable, although if we sum the top two categories, 53% of NRA participants, 59% of Express Efficiency participants, and 63% of SPC participants reported that the respective programs had a substantial improvement on their knowledge of energy efficient technologies. We would expect that NRA participants would at least learn as much as participants of the incentive programs, if not more. However, the results shown in Figure 4-6 suggest that NRA participants may not be getting as much from the audit as hoped, and that participants of Express Efficiency and SPC are learning quite a bit simply from participating in the incentive/rebate programs.

Figure 4-6: Program Influence on Participants' Knowledge of Energy Efficient Technologies



It should be noted that the sample was biased toward SPC and Express Efficiency customers who had participated in multiple programs, and NRA customers who largely had not participated in the incentive programs. To test for this possibility, the evaluation team examined the frequency of responses for those who had only participated in one program component. This left 63 NRA-only participants, 55 Express-Efficiency-only participants, and 102 SPC-only participants. Examining the top two responses, 52% of NRA-only participants, 60% of Express-Efficiency-only participants, and 60% of SPC-only participants gave a rating of “4” or “5,” indicating they felt that the respective programs had improved their knowledge of energy efficient technologies quite a bit. *Even after narrowing the analysis to those who had participated in one program component only, it could be that those who receive an audit are perhaps learning less about energy efficient technologies than those who participate in the incentive programs. Or, the causality could be the reverse. Another (perhaps stronger) hypothesis is that those who learned about energy efficiency also learned that the utility promotes energy efficiency with financial incentives that are worth seeking out.*

Usefulness of Energy Audit

Although participants indicated that the energy audit improved their knowledge of energy efficient technologies and practices just as much as, or even slightly less than, those who participated in one of the incentive program, perhaps the audit report is useful in the long-term as a reference when changes are ready to be made. Thus, to follow up, the survey asked audit participants how useful the energy audit will be when they consider future equipment purchases or retrofit projects. As shown in Table 4-3, 83% percent said the report would be “somewhat” or “very” useful, while 14% said the report would not be useful at all. Table 4-4 shows the various reasons respondents provided for why respondents thought the audit would be very useful. These respondents said that the audit provided information regarding how to save money, made customers aware of their energy use, and recommended certain equipment to use.

“We are now very aware of how long we might unnecessarily keep equipment on and we are trying to get the budget to have the windows tinted. The landlord didn’t want it done, but we finally convinced him by using all the money and energy saving statistics we have from the SCE report.”

Table 4-3: Usefulness of Audits Results for Future Equipment Purchases or Projects

Response	Frequency	Percent
Very useful	26	41%
Somewhat useful	27	42%
Not at all useful	9	14%
Don't know	2	3%
Total	64	100%

Table 4-4: Reasons for Usefulness of Energy Audit

Responses - Very Useful	Frequency	Percent
Made Us Aware of How Money Can Be Saved	8	31%
Made Us Aware of Our Energy Usage/Showed Us Ways To Lower Energy Use	7	27%
It Was Helpful/Took The Guess Work Out For Me	3	12%
It Tells Us More Efficient Equipment That We Should Use	2	8%
Provided Expert Input	1	4%
Provided Information on Industry Suppliers and Products	1	4%
Don't Know	2	8%
Confirmed the Changes We Should Make	1	4%
Nothing	1	4%
Total	26	100%

Those who did not find the audit useful provided a variety of reasons, such as not being able to make changes or the recommendation(s) not applying to their business.

“Everything that was on the report was done already.”

“Because the equipment we have is specialized and we can’t change it too much.”

“We don’t have machinery that this is good for.”

“Because I did not purchase or retrofit anything.”

“I don’t know where it (the audit report) is at this point.”

“Because I didn’t get any recommendations.”

“We won’t be buying other equipment, like the air conditioners, those are the landlord’s responsibility. Based on the report, we won’t be changing anything else.”

Although audit participants’ current awareness of energy efficient technologies is not necessarily greater than those who participated in the incentive programs, the vast majority of audit participants said that the audit report is a useful reference when they are ready to make changes. Although they may not have an immediate increase in knowledge as a result of the audit, most will use the audit report as a valuable reference tool when that awareness is crucial: at the juncture when they are prepared to purchase new energy efficient equipment. Still, one would expect the audit to have an impact on awareness greater than that of the incentive programs. On the other hand, these results suggest that participants of Express Efficiency and SPC are learning a fair amount just by virtue of participating in the incentive programs. Perhaps the causality can be in the other direction; customers are participating in the incentive programs because they learned more about energy efficient technologies via the energy audit.

Summary of Participant Survey Findings

The overarching findings of the participant surveys indicate that while satisfaction with the programs is high among participants, the level of integration of the program components is low. This result is evidenced by the low awareness of the Express Efficiency and SPC programs among NRA participants.

Program participants were generally satisfied with the programs. NRA participants were very satisfied with the professionalism of the auditor, but less satisfied with the level of support from SCE after the audit was conducted. Participants of both SPC and Express Efficiency were satisfied with the performance of the equipment they selected. Participants of both programs were also quite satisfied with support from and knowledge/expertise of SCE staff. Express Efficiency participants were least satisfied with the utility bill savings resulting from the itemized changes that were made, and SPC participants were least satisfied with the rebate amount relative to the total project cost for the calculated measures, likely reflecting the scope of projects completed through these two programs. However, the lowest mean rating for SPC participants was above a “4” on a 5-point scale, meaning that overall satisfaction with SPC was especially good.

Barriers to participation include lack of financing and application difficulty. Almost 40% of the NRA participants we surveyed said they had installed equipment without seeking incentives. While some said their equipment did not qualify for incentives, others said that applying for incentives was not worthwhile. Those who did not make changes cited lack of financing or project cost as a barrier to participation. Express Efficiency participants reported that the application was too lengthy and too

complicated. SPC participants also reported that the process was not entirely clear, they needed assistance with the application process, and that the rebate amounts ended up being less than expected and not worthwhile.

NRA participants are not typically aware of SPC or Express. One reason for integrating the three program components of BIS is so that participants of the Audit can be easily funneled into the incentive programs. However, our research shows that NRA participants were generally not aware of Express Efficiency and SPC. Furthermore, when we asked participants of the incentive programs to report how they learned about the programs, none mentioned SCE's energy audit. It appears as though the Audit is not being used to systematically market the incentive programs.

The three program components appear to be equally responsible for increasing awareness of energy efficient technologies. The majority of program participants report that the program resulted in an increased awareness of energy efficient technologies and practices for their business. However, because the Audit program is primarily meant to educate participants about these opportunities, one would expect that Audit participants should have the greatest awareness of the three groups of participants, while the reverse is true; of the three groups, Audit participants had the least awareness of energy efficient technologies and practices. However, Audit participants also reported that they will reference the Audit report when it comes time to make changes, meaning that their current awareness of the specific technologies is perhaps less important because they can always use the report as a reference tool.

4.2. The Nonresidential Energy Audit Participant Perspective

As noted previously, the evaluation team conducted in-depth interviews with a sample of NRA participants that did not participate in Express Efficiency or SPC in the 2006 – 2008 program cycle. To learn more about how the small business community viewed the usefulness of the audits and why/why not these customers moved on to participate in the incentive programs, the sample for this interview effort was limited to only small and very small NRA-only participants. The remainder of this section provides key findings from those interviews.

How Respondents Learned About the Audit

When asked how they first learned of the audit, 38% of respondents said that an SCE representative or auditor made an unscheduled visit to their business and explained the energy audit.

“They actually walked in and told me they needed to conduct the audit of our energy use.”

“There was a gentleman who walked by and let me know about it. He set up an appointment for the audit.”

“They showed up. They did the audit right then. It took 15 minutes.”

“They just showed up to do the inspection. I didn't know I had a choice.”

Many respondents had difficulty recalling the audit. If the audit is not customer-initiated, the priority placed on the audit by the customer may be low; this is one possible explanation for why participants may have difficulty remembering the audit. Table 4-5 shows the other ways that respondents reported learning about the audit.

Table 4-5: How Respondents Learned About the Energy Audit

Response	Freq.	%
SCE Rep or Auditor stopped by	19	38%
Mail	7	14%
Customer called SCE	6	12%
Someone from SCE called	3	6%
Friend, business community	3	6%
Someone else at the business	2	4%
Informed by contractor	1	2%
Prior participation	1	2%
From a rebate program	1	2%
Don't Remember	7	14%
Total	50	100%

One source of confusion for NRA participants surrounded free lighting programs (either Direct Install or other such programs that offer free CFLs and/or free installation). Ten of the fifty respondents, 20% of the sample, mentioned that they had received free lighting from SCE. This free lighting often occurred within a few months of receiving the audit (either before or after the audit). It may be difficult for customers to differentiate between the audit and free lighting, especially if they occur close together in time. Comments from two different customers illustrate this finding:

“[SCE] installed free lighting fixtures. I assumed it was because of the audit. Maybe not. They called me. It [the deal] was done over phone. This was about 90 days after the audit...All installations were free and did not involve a rebate program.”

“They came in and said the lights would work a lot better. They didn’t cover all the lights, just a percentage of them. I don’t [specifically] remember the energy audit, they happened around the same time.”

This can create muddled expectations. Customers might pursue or agree to an audit thinking that it ensures they will get free lighting. This became apparent when we asked customers to describe the reasons they participated in the audit:

“I wanted to change out the lighting and ballasts for free.”

Another customer conveyed his displeasure about not receiving free lighting after the audit:

“How can I do it on my own? I don’t have the time. Where are the Edison people to install the fixtures I need?”

Customer Satisfaction

Customers seemed pleased with the auditors who toured their businesses and provided recommendations. Customers also commented on the auditors’ professionalism and helpfulness. Given that auditors are stopping by customers’ businesses unannounced, the professionalism (including presenting ID to customers) seems to be very important to the customers and thus is important to the success of the program.

“They were wonderful, really nice, and explained exactly what they were doing, why, and what the benefits were. They gave good tips on saving energy use and guidelines.”

“Normally we turn people away, but I do remember them coming in – they were very polite, said they would be here as little time as possible, and that we could save money.”

Audit Recommendations

Just over two-thirds (68%) of the interview respondents remembered receiving a summary of the energy audit results. The remaining respondents said they did not receive (12%) or could not remember receiving (20%) an audit report with recommendations for energy efficiency improvements. Although it is possible that the report was given to someone else at the business, these numbers suggest that some improvements could be made to highlight the report or recommendations in customers’ minds. As mentioned previously, it is possible that the concurrent implementation of Direct Install program rather than customer-initiated approach to the audits could reduce the amount of importance or attention placed on the audit recommendations.

Of those who remembered receiving an audit report, results were mixed as to whether the report provided next steps for implementing the recommendations. Some customers explained that the audit report was clear in providing next steps in how to implement the changes and apply for incentives/rebates, while others suggested the clarity surrounding next steps could be improved.

“The report gave a lot of ideas and some additional information to contact if I wanted to make any changes. [It was] wonderful about giving ideas that were easy to do – here’s the light bulb you need. [The report] definitely helped out.”

“Main thing was that when we upgrade, we should get the suggested appliances, you send in paperwork and get a rebate. When you make major investments like solar panels, we will get money off that too.”

“The auditors never talked about rebates. That might be useful when considering upgrading the older A/C.”

“Edison didn’t relay any of that information [regarding rebates and incentives].”

“None really. Just kind of here’s what you need, go find somebody to do it.”

NRA Participant Awareness of Incentive Programs

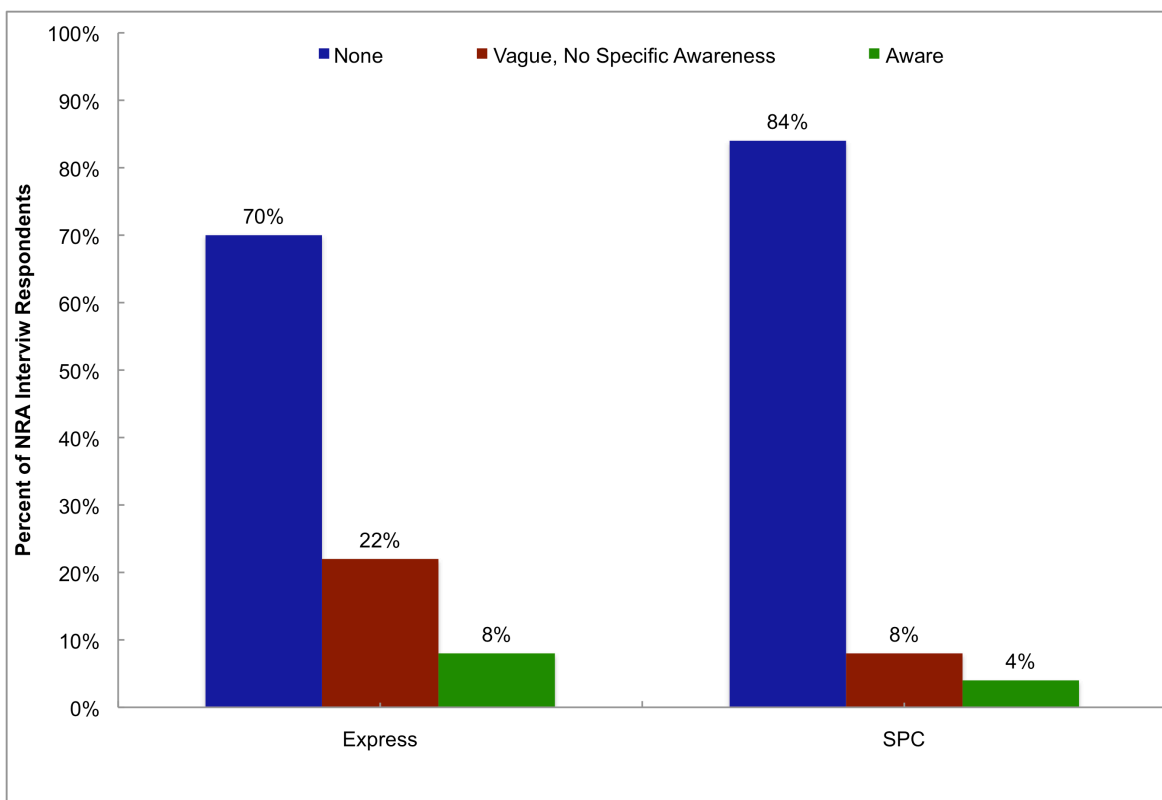
As shown in Figure 4-7, only 8% of respondents had a concrete awareness of Express Efficiency, and 4% had a concrete awareness of SPC. Another 22% of interview respondents were vaguely aware of Express Efficiency, and 8% were vaguely aware of SPC. These results are similar to those obtained in the participant survey as shown in Figure 4-3, although awareness is somewhat lower for interview respondents who consisted solely of small businesses. Most of these customers thought that maybe the audit had recommended they participate in one or both of the incentive/rebate programs, but respondents were unsure:

“No. That sounds familiar, like the lighting thing the auditor mentioned.”

“No, maybe it’s the \$3500 incentives they were talking about with the purchase of additional coolers, or maybe it’s something else.”

“The SCE rep kinda went over the incentives, but there was not much money left in the programs. [When asked about Express Efficiency:] I haven’t seen anything like that.”

[When asked if the audit report provided information about incentives and rebates:] “It was pretty clear. It did provide information about the incentives and rebates.” [When asked if he was aware of Express Efficiency:] “I didn’t know that.”

Figure 4-7: NRA Participant Awareness of Express Efficiency and SPC

Implementation of Audit Recommendations

Table 4-6 shows the percentage of interview respondents that implemented any of the audit recommendations. Forty percent of respondents said they had implemented changes as a result of the audit.

Table 4-6: Implementation of Audit Recommendations

Response	Frequency	Percent
No	21	42%
Yes	20	40%
Don't Know/Can't Recall	5	10%
Didn't Receive Any Recommendations	4	8%
Total	50	100%

Forty-two percent (42%) of the respondents said they did not make any changes as a result of the audit. We asked these customers what the primary barriers were for implementing the audit recommendations. There were a variety of reasons why customers did not implement the recommendations, summarized below.

Cost/Cost-Effectiveness. Measure and installation first cost were barriers for some customers:

“It’s not cost effective at this time – the refrigerators are working fine even though they’re already older. It’s not worth spending \$300 on a refrigerator to save \$10 in energy. When they get bad we will replace them. The auditor said it would not be cost effective – the SCE rep said it too.”

“We constantly buy new refrigerators when they go bad, but the cost of energy efficient equipment is so high, the rebates don’t have an impact. Our electric bill does not show the benefit of the out of pocket expense.”

Split Incentives. Customers who leased their space sometimes mentioned that changes would need to be approved by the building owner, or that the owner was the primary decision-maker for all changes, while others explicitly raised the split-incentives barrier.

“The changes are up to the owner...even lighting.”

“...When I thought about it, it seemed that there was no real benefit or justification. The expense of the measures would benefit the building owner rather than us [the lessee].”

Rebate/Incentive Programs Too Complex/Not Sure What To Do. Some customers felt that the incentive/rebate applications were too complex or that the next steps were too difficult to understand:

“The complicated nature of the program....too many hoops to jump through.”

“Wasn’t easy to figure out what to do, where do you get, how much it costs. They need to make it easier.”

“I didn’t know exactly what to do...I need some advice to see what I need to do.”

Rebate/Incentive Program Expired/Out of Money. Some customers reported that the rebate/incentive programs were out of money or expired, and that this prevented them from purchasing an installing the new equipment:

“The program had no money.”

“The program was out of money and SCE never came back with the energy savings calculations.”

Customer Did Not Receive Any Recommendations. As shown earlier in Table 4-6, 8% of the interview sample did not receive any recommendations after the audit:

“She couldn’t offer any recommendations, just thanked me for my time... Yes (an SCE rep did follow up with me), but there were no recommendations to talk about.”

“They walked through the building, looked at the lights, took notes, and never got back. They didn’t point out any energy efficiency recommendations at that time. No, we never got any recommendations.”

Little Room for Improvement. Additionally, some customers who received recommendations felt there was not much else they could do to improve the energy efficiency of their business (i.e., the customer had previously made energy efficiency improvements):

“For the most part there weren’t recommendations because all the lighting was already replaced...”

“I do recall walking through the facility with the auditor. I believe we found that since we had recently taken over the lease-hold on that building, we had already upgraded the lighting and other systems and had nothing to implement under the rebate program.”

Reasons That Customers Made Changes Without Applying for Incentives

Table 4-7 shows the equipment or other changes that audit participants made as a result of the audit.¹⁴ Lighting changes were the most common, followed by no-cost behavioral changes such as unplugging unused equipment and powering down equipment at night.

Table 4-7: Self-reported Changes as a Result of the Audit.

Response ^(a)	Frequency	Percent
New Lighting ^(b)	19	38%
Behavioral Changes	6	12%
New Refrigeration Equipment	2	4%
New A/C Equipment	2	4%
Implemented "Smaller Changes"	1	2%

a. Categories are not mutually exclusive. That is, a respondent could have reported implementing more than one type of change.

b. This includes seven customers who reported that they received lighting measures for free.

As shown in Table 4-8, of the 20 customers we spoke with who implemented any of the audit recommendations as a result of the audit, four customers (20%) reported that they applied for rebates/incentives. This low number is not too surprising, because we focused our sample on customers who had participated in NRA, but not SPC or Express Efficiency. However, 12 of the 50 customers we interviewed had installed energy efficient measures without applying for incentives/rebates. This means that it is not necessarily the case that NRA-only customers are not making any changes as a result of the audit; some are making changes but are not applying for financial incentives.

¹⁴ Three other participants reported making lighting changes that were free of charge and not related to the audit. Other customers reported making various other energy efficiency improvements prior to the audit.

Table 4-8: Percent of Customers Who Applied for Rebates/Incentives and Implemented Audit Recommendations

Response	Frequency	Percent
No	12	60%
Yes	4	20%
N/A - Behavioral Changes Only	1	5%
Don't Know/Can't Recall	3	15%
Total	20	100%

We asked customers to report why they did not apply for incentives. There were several different reasons, summarized below.

Customers Received Lighting Measures for Free. Perhaps the most common reason for not applying for an incentive/rebate program was because many customers (20% of those we spoke with) received lamps or fixtures at no charge, at times even prior to the audit:

“[I] didn’t have to [apply for incentives]. It was all free.”

Rebate/Incentive Program Was Out of Money. Some respondents told us they had intended to apply for rebates/incentives, but they were told the program was out of money.

“We didn’t apply for incentives because the program was out of money.”

Not Sure What to Do/Too Difficult. Other customers were not quite sure how to proceed or remarked that the application process was simply too difficult. For example, one customer said:

“It was the proper installation of the measure and the documentation required that prevented us from participating in the rebates.”

Didn’t Need Rebates. Some respondents felt that the rebate wouldn’t be worth pursuing:

“It wasn’t an expensive things to do. We didn’t need rebates.”

Didn’t Qualify for Incentives/Rebates. Another reason audit customers installed equipment without applying for incentives/rebates is because the equipment they were replacing did not qualify for incentives/rebates:

“...We didn’t qualify for the rebates – there weren’t enough lights that we were changing.”

“They said that the lighting didn’t fall under the guidelines of the program.”

Didn’t Know About The Rebates. One customer remarked that they simply weren’t aware of the rebates/incentives:

“Yes [I have installed equipment without applying for a rebate]. I don’t know about them [the rebates].”

Customers Made Behavioral Changes. Just because an NRA participant has not applied for incentives or rebates does not mean the program is unsuccessful. Some of the recommendations are behavioral, no-

cost changes, rather than the purchase of new equipment. For example, customers unplugged unused equipment, powered down equipment at night when it is not in use, retired inefficient appliances (without purchasing new ones), and adjusted A/C equipment.

“I had halogen lighting – I bought some new lights. I also unplug things not being used in the evening.” “[My] electricity bill was really expensive. It used to be \$140. Now it is \$40 a month.”

“I just unplugged the freezer, turned lights off inside the cooler...[and] keep doors closed on the refrigerators.”

Requested Support from SCE

When asked what types of services, information, or other support they would like to receive from SCE in the future, many customers commented on their desire for more information. They are motivated to save energy; they want more information about how to save energy, and about the rebate/incentive programs, in particular. These responses showcase the potential for a well-integrated BIS program to provide informative audits that provide information on next steps including information regarding the incentive programs, Express Efficiency and SPC.

“The auditor never talked about rebates. It might be useful when we’re considering upgrading the current A/C. If there was a rebate, it [upgrading to more efficient equipment] could be a consideration.”

“Incentives will be a great idea, how to save, those types of rebates you’re talking about. We’d like to get more information so we can get on it.”

“We’ll do anything we can to reduce our consumption and the bill. It would be great if somebody could help us out.”

Summary of Participant Interview Findings

Overall, the in-depth interviews with NRA participants elucidated reasons why some NRA participants may not participate in SPC or Express Efficiency. The interviews also highlighted the potential for increasing success by increasing awareness of the incentive programs and providing guidance and information on next steps to facilitate implementation of energy efficient improvements. Two key findings are:

Awareness of Express Efficiency and SPC among NRA participants is low. According to respondents, next steps for implementing the recommendations were not always clear. Some respondents said that the auditors never mentioned rebates, and others said the programs were complex, or they just were not sure what to do next. While some customers felt that they were informed about the rebates, the number who claimed they were completely unaware of these specific programs is quite large; 70% were unaware of Express Efficiency and 84% were unaware of SPC. On one hand, perhaps just knowing that rebates exist is all the customer really needs to know; when the right time come to make equipment changes, they could do the detailed research needed to participate in the specific programs. This research suggests that a system for ensuring that every customer is made aware of the Express Efficiency and SPC programs during the audit, and a system for following up with NRA participants to provide guidance for implementing the recommendations after the audit, are not in place.

The audit program can light the way for motivated customers. Although this sample of interview respondents had not participated in Express Efficiency or SPC, some had made behavioral changes as a result of the audit for which they attribute lower energy bills. These customers seem to be willing to make (no/low cost) changes and are for the most part, quite interested in saving energy. They want to know more information about the rebates, and they want more information on the changes they can make and how to implement them. Reaching out to customers, making sure they are aware of next steps and how to participate in the incentive programs, and providing guidance along the way, is key to bridging the gap for this set of customers.

4.3. The Near-Participant Experience

The final source of information utilized to formulate the customer perspective of the BIS program is a sub-group of program participants that had submitted applications that had then either been withdrawn or had expired. These “near participants” offer a unique and extremely valuable insight into the BIS program and sheds light on specific areas of the program delivery that is allowing customers to “stall” in the process.

Because the Express Efficiency program has a high rate of discontinuation - 32%¹⁵ - and the fact that these customers had already begun the application process, this research was undertaken to examine the causes of discontinuation and to identify steps SCE might take to foster increased levels of application completions. These interviews were used to gather information on discontinued and resubmitted projects, completed and planned installation activity, and to identify factors that could have contributed to successful completion of eligible projects.

The next section provides detailed results of interviews with near-participants of the Express Efficiency program,¹⁶ followed by a summary of key findings.

Application Status

One of the matters examined in this study was customer intent to move forward with their applications. Based on respondent feedback about actions taken or intended, each project was classified as either “discontinued” or “resubmitted.” Based upon the in-depth interview results, EMI categorized 25 (83%) of near participant project applications as discontinued and 5 (17%) as resubmitted. In the sections that follow, findings for these two groups will be reported separately. Note that more than a quarter of the respondents (8, or 27%) indicated that their projects had been denied by SCE.

The five projects that were being resubmitted were fairly evenly split; three were being resubmitted as the original project, while two applications were modified. The large majority of these had been completed at the time of the interview; one was in progress.

¹⁵ Based on EMI’s analysis of program data and conversations with the Non-Residential Program Manager at SCE.

¹⁶ The evaluation team attempted to include SPC near participants in the interview sample, but the required data was not available from SCE in time for this research.

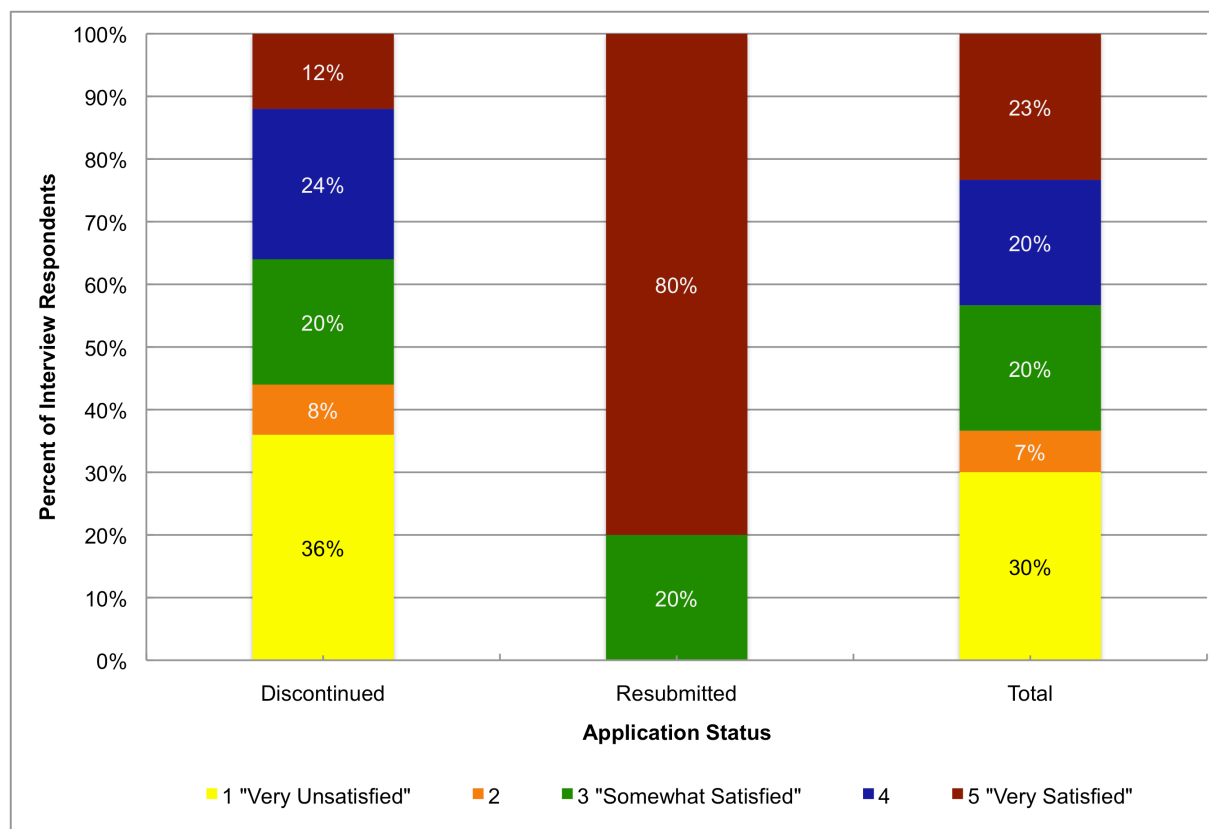
Appendix A provides a detailed profile of the Resubmitted, Discontinued, and Total Near Participant populations interviewed for this research. Company size may be a factor in participation behavior; not one of the companies that are resubmitting their application has fewer than 18 employees; all of these smaller firms have now fallen out of the program.

Audit Program Awareness, Participation, and Influence

Roughly half of all Near Participant respondents (53%) were aware of the audit program and 23% had participated in the audit. Interestingly, participation in the incentive program can lead to subsequent participation in the audit program, as well as the reverse. Three customers had the audit prior to participating in Express Efficiency, while two had the audit afterwards. Among those who had the audit first, two out of three indicated that the audit was influential in Express Efficiency participation.

Satisfaction

During the interviews, EMI asked respondents to rate their overall satisfaction with the Express Efficiency program on a five-point scale with one being “very unsatisfied” and five being “very satisfied.” For the near participant group overall, satisfaction scores averaged 3.0. As shown in Figure 4-8, satisfaction scores were higher for the five customers whose projects were resubmitted: none of these customers gave the program less than a three and, in fact, all but one gave the program a top score, for an average of 4.5. In marked contrast, those whose applications had been denied gave the program, on average, a 1.8 score. The strong negative sentiments in this group primarily stem from the failure to obtain the desired rebates.

Figure 4-8: Comparison of Satisfaction Ratings

Ratings on a five-point scale, with 1 being “very unsatisfied” and five being “very satisfied.”

Reasons for Discontinuation

All respondents were asked to identify the reasons for discontinuation of their applications. The chief reasons cited for discontinuation were SCE denial of the application; inaction by SCE; internal constraints, either scheduling or lack of labor resources; and unattractive payback or ROI, project expense, and budget constraints. Table 4-9 provides a full breakdown of responses.

Table 4-9: Factors Leading to Application Discontinuation

Reasons for Discontinuation	Frequency (n=30)	Percent
SCE denial of application	9	30%
Resubmitting	5	17%
Lack of customer follow up	4	13%
Non-response from SCE	2	7%
Unattractive ROI/payback	2	7%
Project expense, budget constraints	2	7%
Manpower constraints	2	7%
Application was not discontinued	2	7%
Equipment maintenance	1	3%
No reason given	1	3%

The remainder of this discussion presents findings first for the discontinued project respondents, followed by feedback from the respondents whose projects were resubmitted.

Discontinued Applications

The vast majority (83%) of respondents' applications were classified as discontinued. However, this does not typically reflect either a lack of interest or a failure to complete the projects. In fact, 70% of near-participants with discontinued applications had installed the proposed measures. Thus, most near-participants only lacked a completed application to become participants of the program. The following section details program satisfaction, providing information as to why participants did not complete participation in the program.

Program Satisfaction

Eleven out of 25 (44%) of the Discontinued applications respondents were dissatisfied. As mentioned above, low opinions of the program were predominantly attributed to project denials coupled with a failure to communicate with or assist the customer through the process.

"We thought we met all the requirements, and they said something was not met. We had a month or two-long battle back and forth. I felt like it was bait and switch. It wasn't too good of an experience, spending money in the recession. They need to give us the exact reason we are not qualified and not give us the runaround."

"Nothing worked out. I decided not to pursue it, because it became too much of a hassle. I submitted the appropriate paperwork, nothing ever came of it. I never heard anything back. It wasn't worth the \$100 rebate to pursue it."

"I am very unsatisfied. I didn't get the rebate. So much time spent – too much money. They let me spend \$1000 and they did not repay me."

At the other end of the spectrum were an almost equal number of firms that gave the program top ratings. Here, good support from SCE personnel and program simplicity were cited as the best features of the program. Those who gave the program a rating of 4 or 5 offered the following comments:

"I'd give it a 5. Why? It's our rep, he's been extremely helpful and very good with contact information and follow up."

"Very satisfied. We ended up getting the bulbs for free, we saved the money for the purchase of the bulbs and also saved electricity. The only thing that could have been better would be to pay for the installation."

"The simplicity. The amount of the rebate, and the help provided by the reps."

"Whenever I contact SCE, I always get the right answer. I have to say it was really helpful. And actually I had several difficulties in the beginning because I didn't know who to talk to... The Express Efficiency Department is really helpful. They give pretty accurate information for what I need."

Denied Applications

Customers who proceeded in good faith to invest in equipment that was disallowed were understandably upset. When this investment was made under the recommendation of contractors who the customers perceived as, in essence, agents of or allies of SCE, there was resentment over the errors. These customers feel that they are bearing the cost of mistakes made by others whom they trusted to give them proper program advice. Customers expressed a desire for more communication from SCE regarding why their applications had been denied.

"They didn't tell me what we did wrong or the application, they just said, 'Denied.' The electrician was confused too."

"I think they should make sure that the companies installing the lights understand what they are looking for, what to put on the invoices and the quotes."

"They are sending out the lighting contractors- they better give the correct information ... When I am talking to these people [at SCE], I feel like, 'Wait a minute, what did I do wrong?' Almost like I need an agent. The contractor filled out everything that was wrong."

"I'd like a call from the utility as a follow up to respond to the question about what I'm installing and why it doesn't qualify. And what might I do to qualify?"

Application Process

Feedback on the application process was mixed. While some Discontinued respondents indicated the process was simple and clear, more respondents complained of difficulties understanding the process, the equipment eligibility requirements, and the status of their applications. Representative comments on these problems included the following:

"Once I initiate the process, there should be more communication. If the deadline passes, SCE should contact the person who they know submitted a rebate request. Say, 'We got your request, you need to submit these forms within however many days.' If nothing happened within that period of time, send an email to that person. Say, 'Call us at this number.'"

“There was no feedback on why our application was declined. And we had multiple internal reviews of the paperwork before it was submitted.”

“Provide a little more information on the application do’s and don’ts – upfront, in plain English, what we can do.”

“Unfathomable website and application, even for a guy with a college education.”

“I thought it was a good program, but there was no help completing the form. When I called, they weren’t helpful or knowledgeable, like there was a disconnect.”

“I went through many different departments. One minute they said ‘Great job’ but then sent it to another department. At some point I thought, ‘I have to run a business’. I lost patience. I wouldn’t recommend it to people who run a small business.”

Customer Service

Judging by the feedback received in these interviews, it appears that the level of customer support received by this group of respondents ranged from excellent to a complete breakdown in communications. Customer’s cited SCE’s failure to inform customers early on about disqualifying triggers (such as moving to a new site), as well as failures to communicate about impending expiration dates, reasons for rejection and what steps, if any, the customer might take to qualify. Multiple customers also complained about the inefficiency of the communications and an overly iterative process that became a barrier to pursuing the rebate. Because the interview responses strongly suggested the importance of customer support/service as the principal performance variable, a number of comments on this topic are featured below.

“At the beginning we were struggling with how to get going. Once we got engaged with SCE and started talking to SCE, we really started going. It was just a matter of getting engaged with their people.”

“If it comes down to what my account manager did for me trying to get this through, I would say 5 [out of a five point scale]. On the other hand, we’re having them come back continually telling me, ‘You need this, you need that.’ It wasn’t one time, they kept on making me do double work and that was frustrating. In that respect I’m very unsatisfied, a 2 or a 3.”

“The one issue I had was that I called one person who is my account person, but she couldn’t answer my questions. She referred me to someone else. And the technical person wasn’t always available and wasn’t sure how to manage my questions. They had a person to process the paperwork but I needed technical expertise specifically related to my application.”

“[The program needs] better customer service. I was going through our accounts manager. I would want some better customer service through Express Efficiency.”

“A representative like ours has made it very, very easy for us to get in to the program. We completed another one, and we’re trying to complete another project this fiscal year.”

Problems in the Field

One firm with a very bad experience had language barriers and not only failed to get the rebate they expected, but also described an unethical contractor who misled the owner, installed unwanted products and failed to return with the promised, and desired, lighting products. This firm felt it had been taken advantage of by unscrupulous contractor and was out \$1,000 for a product they later threw away. This was an atypical experience but raises an important field issue for SCE to monitor.

Incentives

Just under one-third (30%) of Discontinued respondents directly indicated that higher incentives would have been influential. Perhaps the higher incentives would have created a stronger motivation to see the application through to the end. Elsewhere this research did find that 20% of respondents dropped their projects either due to project cost, budget constraints, or unattractive returns on investment. This feedback, plus additional comments that the current program rebates were a key decision factor, indicate that the Express Efficiency incentives were very influential.

“It’s all about ‘What does it really cost.’”

“The more money we can get back, the better.”

“I felt that when I did it that I would get a rebate, and that was a motivator.”

Only 15% of the Discontinued respondents felt that financing assistance would have increased the likelihood of successfully completing the application. The low percentage that indicated that financing would help probably reflects the fact that most of the projects were, in fact, completed and it was only the application approval process that broke down.

“No, I think there were a couple contractors who were willing to help with financing, so that probably would have been an option.”

“It was not an issue for me then, but this year we are not buying AC, because of this issue, because of the money. Financing could be helpful.”

“I might be interested, not necessarily for that project though”.

Potential Facilitators

Respondents were asked what, if anything, might have enabled their firm to continue with the proposed project and, specifically what SCE might have done toward this end. Generally, responses focused on a need for follow up from SCE. Following up on this, respondents were then prompted about the likely impact of additional assistance, technical analysis, incentives, and/or financing. Among these, assistance in completing the application would have been most valued, followed by additional technical information or analysis and incentives.

“I think, before they discontinued us, if they could have called, this would have been good. And they could have helped us with the application.”

In all, 40% of customers with discontinued projects indicated a desire for assistance in response to this question. (But as this section reflects, customer support was a pervasive theme of the interviews with Near Participants and a principal contributor to success or failure with these customers.)

Additional information or technical analysis would have been helpful to 28% of these respondents. Better access to information, both on-line and through staff, could have been of real value to these customers.

“SCE was trying to help us get through, but they weren’t sure what the parameters were. Especially the product information. It would have been nice to have a contact with Express

Efficiency to say ‘Hey, those don’t qualify’ and to explain what exactly you need. Our Account Manager wasn’t sure.”

“Sometimes people like me are interested and they try to find out more information. But if you go on-line, there’s not that much information, and if you call, there’s only one or two people that answer the phone. Someone should take a little more effort, explaining the process.”

“It would have been helpful if there was a tutorial on the website. And a number to call, or directions to the right information.”

Resubmitted Applications

A total of five projects were recorded as resubmitted, about 17% of the sample. *All five resubmitted projects resulted in completed installations.* These resubmitted applications did not differ in kind from the original applications. Measures included lighting, air conditioning, and insulated holding cabinets for the transport of school lunches. In other respects, the profile of the resubmitted projects is mixed:

- One firm did not have sufficient funding to move ahead with the project at the time it was first submitted, but resubmitted when that circumstance improved.
- One firm had two different vendors bidding on the work and it is likely that both submitted applications to SCE. Since only one vendor ultimately got the job, the other application eventually expired. (Thus, this customer did not “resubmit,” but rather continued with one application while the other expired.)
- Another firm reported a case in which the manufacturer obtained eligible status for the equipment after the program had gotten launched and there was a delay in the information getting to SCE. The application was not actually resubmitted, just reopened at the customer’s request.
- The other two resubmissions were completed without any direct involvement of the respondent and it is not clear whether this action was taken by their staff, vendors, or SCE.

Application Process

For the most part, the customers who resubmitted applications viewed the application process as straightforward – or had a vendor or account representative who took care of it for them.

“It is a very simple application, can’t get any simpler. I’ve had applications in a lot of states. Southern California’s application was pretty simple and straightforward.”

Similarly, these customers did not feel a need for additional technical analysis support. In at least one case, the customer’s information needs were met by the vendor with whom they were working.

Potential Facilitators

As was true for their counterparts who are not resubmitting applications, the firms who are following through with the application were asked what SCE might have done to help prevent the initial discontinuation of their application. The responses covered the same points as identified in the Discontinued group, although this group as a whole felt less need for assistance with the application. Responses from the firms with resubmitted applications included:

“Maybe SCE could try to reach out to the customer more, see what’s going on. When we got the letter, I was very surprised and disappointed. It was pretty bad, we had everything ready, the reservation. We were a little bit devastated about that. Maybe a phone call from Edison, tell us why it was rejected, hear what the customer has to say, see if they have a reasonable explanation.”

“Our customer rep, [name], is super helpful.”

Incentives

Following up on this, respondents were then prompted specifically about the likely impact of additional assistance, technical analysis, incentives, and/or financing. Compared to the Discontinued project respondents, these customers were more comfortable with the application process and program requirements; none felt the need for additional technical information, and two felt the incentives were fine “as is.” Only one of the five customers who resubmitted their application expressed a desire for larger rebates and/or project financing. Otherwise, the incentives were viewed as sufficient and were motivating at current levels.

“I think actually the incentives are very reasonable. The rebate covered about half of what we paid.”

“The project was always based on getting rebates. We probably wouldn’t have done the project without the rebates.”

Summary of Near-Participant Interview Findings

The vast majority of near-participant respondents indicated that they did not intend to resubmit their applications. Surprisingly, the interviews revealed that several respondents’ applications were denied by SCE, and still others reported that they never got a response from SCE. Financial concerns kept others from completing their participation in the program.

One key to success appears to be the amount of assistance received from SCE in completing the applications and in providing follow-up as to what can be done to continue with a rejected application. This was especially true for small customers.

A significant portion of discontinued applications were denied by SCE, while others say they received no feedback from SCE. It is not necessarily the case that customers lacked interest or failed to complete the applications. Application denials were the lead factor for discontinuation (27%), and a number of the respondents did not feel that they had been given the option to resubmit. Another 10% of the firms interviewed indicated that they had had no feedback from SCE on their applications. All told then, over one-third of the Discontinued applications were a result of SCE action or inaction. While the number of application denials raises questions about the accuracy of SCE’s tracking system (these customers were all marked as “discontinued” in the tracking system), the rate of non-response from SCE suggests the need for systematic follow-up with customers who have initiated a rebate application.

Financial concerns are a barrier to participation. Other reasons for not going forward with an Express Efficiency application were split between factors external to the program, financial attributes of the projects, and difficulties with the program. While incentive size was infrequently mentioned as a factor,

20% of these projects were dropped either due to project cost, budget constraints, or unattractive returns on investment, indicating that project economics frequently are determinative.

Program satisfaction levels seem dependent on each customer's unique interface with SCE staff.

Given the population selected for these interviews, it is not surprising that a quarter of the participants gave the BIS the lowest possible ratings. Low scores were reflective of the time and energy wasted and the money expended pursuing program incentives that were denied. Strikingly, an equal number of respondents gave the program top ratings and remarked on the program's simplicity and reasonableness. The SCE program and account representatives who serve as the interface with customers are a critical lynchpin to program performance with respect to both satisfaction and application completion. It appears as though customer satisfaction may be directly linked to the SCE representative with whom the participant consults during the application process.

The most widely desired area for improvement was better communications and support from SCE staff.

SCE is advised to give close attention to the experiences of those respondents who felt they had been failed by either SCE personnel or the vendors who were perceived to be acting as agents of SCE. There is a breakdown in the program process for these customers and real room for improvement in program delivery. The negative experiences of the most dissatisfied segment are likely to leave a lasting barrier to their future program participation. Conversely, respondents who spoke of a positive program experience with superlative account representative support were delivering a related message; namely, the success of the Express Efficiency experience is heavily influenced by the caliber of the customer-account representative interaction.

The desire for greater assistance was stronger among the smaller businesses, and was strongest amongst firms with five employees or less. Application completion rates, as reflected by resubmission patterns, appear linked to this factor. This is not solely attributable to the lesser capacity and possibly lower technical knowledge of the small business participant, but also linked to the availability of additional account representative support to these customers. Additionally, it appears that respondents with prior experience with utility programs were more readily able to understand, anticipate, and navigate the program requirements.

5. THE MARKET PERSPECTIVE

EMI conducted 60 in-depth telephone interviews with stakeholders in order to gain perspective on the BIS programs and the market in which they operate. The interviews focused on stakeholders' experiences with the programs and understanding how various groups are contributing to outreach efforts at the local level. Interviews also focused on the potential for partnering with organizations and supply-chain market actors to further disseminate information about SCE's incentive programs and services throughout the market.

The market-perspective interviews targeted three specific groups:

- **BIS Program Vendors:** The evaluation team interviewed 30 firms that sponsored for Express Efficiency or SPC program participants applications.
- **Community-Based Market Actors:** 14 organizations serving local communities within SCE's service territory, such as ethnic business organizations and small business associations.
- **Supply-chain Market Actors:** 16 equipment manufacturers and distributors involved with lighting, refrigeration, and other end uses who serve the Southern California market.

EMI also interviewed SCE staff and third-party engineering reviewers. Information from these stakeholders is presented in Chapter 6. The reader is referred to Appendix A for details regarding detailed interview objectives and sample design.

Highlights of the information gained stakeholders include:

- **Supply-chain market actors mentioned cost as the number one factor preventing their customers from demanding more energy efficient equipment.** This is consistent with reports from the customer research, underscoring the importance of financial incentives to the BIS program. Other barriers include language, lack of awareness, and misinformation.
- **Community-based partnerships are an effective means of reaching out to small businesses and overcoming barriers.** Organizations currently partnering with SCE are highly satisfied with these partnerships, which help to inform a wide variety of potential customers about program offerings. These partnerships are particularly important for overcoming language and trust barriers across various communities.
- **Manufacturers are hesitant, but willing to consider partnering with SCE.** Distributors, who are closer to the customer in the supply chain, are more receptive to partnering with SCE in order to get information out about the BIS program to their customers. While some manufacturers immediately see the benefits of working with SCE's incentive programs, others do not feel it is their responsibility to be aware of the programs or to pass information on to their customers. However, most were at least willing to consider such partnerships. Manufacturers need information regarding how partnering with SCE can be beneficial to their business.
- **SCE can assist stakeholders in increasing customer awareness and participation.** Account representatives are essential for forging relationships with community-based organizations. Furthermore, several respondents noted that account representatives are a valuable aspect of the program, suggesting ways that this support could be increased. Vendors noted that account representatives could provide marketing collateral and other assistance that would help them sell the program to their customers.

The remainder of this section presents findings in detail for each of the stakeholder groups that contributed to this study. Section 5.1 summarizes the insight from vendors who sponsored applications for participants of Express Efficiency and SPC. Section 5.2 discusses community-based market actors, followed by supply-chain market actors.

5.1. Insight from Vendors that Sponsored Incentive Applications

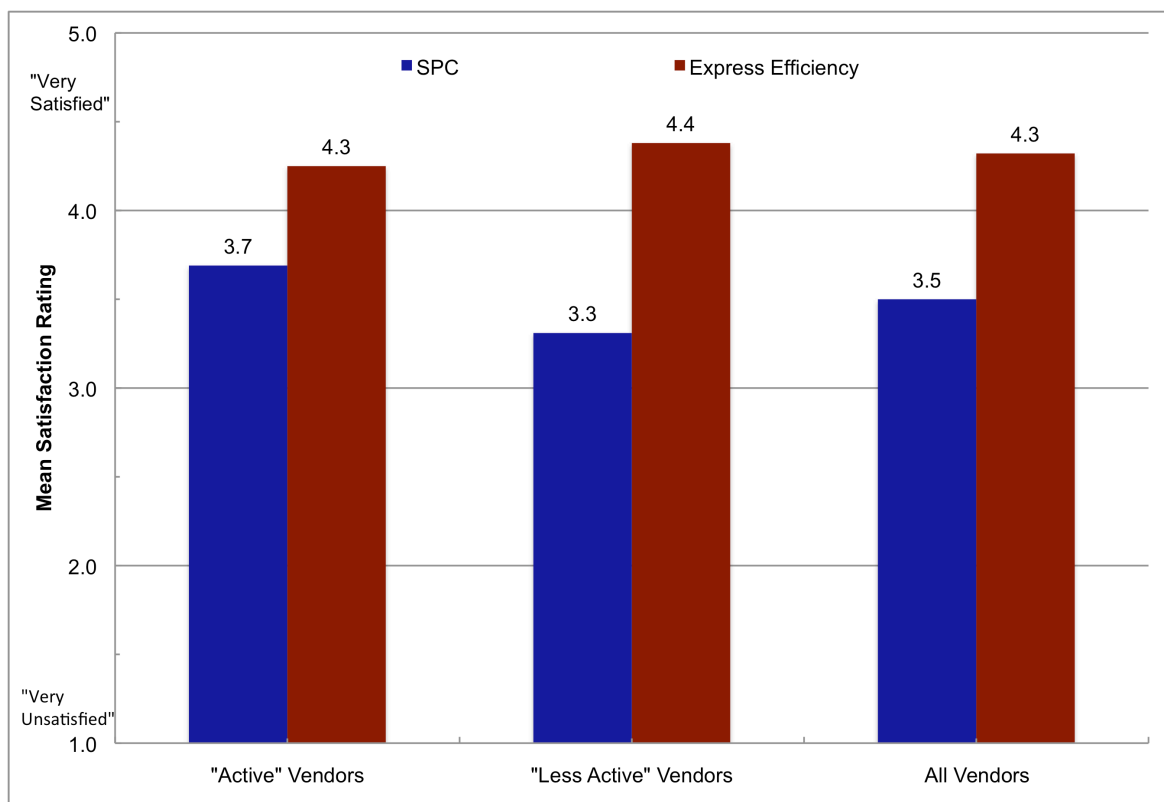
This section provides details of findings from 30 in-depth interviews with vendors who sponsored applications for the Express Efficiency and/or SPC programs. The sample design ensured that vendors associated with both Express Efficiency and SPC were represented. The sample design also designated interviews to be conducted with both “active” and “inactive” vendors,¹⁷ to ensure the study benefitted from experiences of those who worked frequently with the program. Reasons why some vendors were not very active in sponsoring applications were of particular interest for this study.

The interviews focused on program satisfaction, feedback on the application process, equipment eligibility, and rebate levels, perceived customer awareness, and the level of support from SCE to help vendors use the programs as a sales tool. For each of these areas, we provide a summary of what is working well and what needs improvement, based upon the interview results. Differences between vendors working with Express Efficiency and those working with SPC are noted when relevant.

Vendors’ Overall Program Satisfaction

Respondents rated their overall satisfaction with working with the Express Efficiency or SPC programs on a 1 to 5 scale, with 1 meaning “very unsatisfied” and 5 meaning “very satisfied.” Figure 5-1 shows the mean satisfaction rating for each program and vendor activity level. Vendors that sponsored Express Efficiency applications were significantly more satisfied than SPC trade allies, irrespective of how active the vendors were with the programs. Within SPC, active vendors appear to be more satisfied than less active vendors, although sample sizes are small and differences were not statistically significant. As will be discussed later, greater satisfaction with Express Efficiency is primarily due to a simpler application process with the itemized program.

¹⁷ “Active” vendors for the Express Efficiency program sponsored 60 or more applications and “Inactive” vendors sponsored less than 60 applications. “Active” SPC vendors sponsored 10 or more projects, while “Inactive” SPC vendors sponsored less than 10 projects.

Figure 5-1: Vendor Satisfaction, by Program and Activity Level

Ratings on a 1 to 5 scale, with a 1 meaning "very unsatisfied" and a 5 meaning "very satisfied."

Application Requirements and Review

While using BIS as a sales tool can be a big benefit to vendors' businesses, some aspects of the program pose particular problems or challenges for vendors and/or their customers. Twenty-two of the thirty respondents — 81% of SPC vendors and 64% of the Express Efficiency vendors — indicated that there were aspects of the programs that they thought needed improvement. Among less active vendors three (38%) associated with the Express Efficiency program and six (75%) associated with SPC said that certain aspects of the program had prevented them from sponsoring more applications. Chief among vendors' complaints were aspects of the application process, including application complexity, slow turnaround times, and the requirement for hard-copy applications.

Complex Application Process

For Express Efficiency, respondents noted that the application forms or rebate process could be difficult for customers, contradicting the fact that some trade allies noted the ease of application as a strength of the program. However, application forms are perhaps easier for vendors because they have more experience with the program. Vendors working with SPC noted that program processes can be overwhelming or cumbersome and calculations can be difficult (although this can be perceived as a

benefit to some vendors offering the service for their customers). Sometimes this prevented vendors from working with SPC, choosing rather to work with Express Efficiency applications instead. Complexity also prevented less active vendors from working with more applications.

“[I] don’t have time to deal with preparing paperwork. At this point with all the reviews, I have a disincentive. It’s way too much time for the carrot. Streamline this process.”

“It’s a challenge, and for me it’s an advantage... It scares you off, quite frankly. However, once you wade into it and start paying attention it can be figured out. It scares off my competitors and customers, but allows me to offer it as a service to them. [But] I have to sit down and block out any other activities so the paperwork/application is filled out properly.”

“Just the ease of use [of the application]. Just the electrical portion. [It is] so diverse, [with] so many different categories. [I] get lost in it very easily.”

“(With SPC) there’s just too much work to prove where you get the numbers from.”

Thirteen respondents reported that their companies had sponsored applications for both SPC and Express Efficiency. Because of their unique vantage point, feedback from these vendors is especially insightful for determining strengths of the programs and areas for improvement. These vendors commented on the complexity and longer application processing time of the SPC program.

“With SPC, it’s much more challenging than Express, because it’s based off calculations instead of itemized measures. Those calculations can be complicated. A lot of end users are discouraged by it.”

Timeliness of Application Processing and Rebate Payment

Respondents mentioned that the unpredictable timing of application reviews and rebate payment can discourage participation, or at least prove inconvenient to sales cycles. Expectedly, vendors that had worked with both programs mentioned that processing times are faster with Express Efficiency than with SPC. For vendors working with SPC especially, the timing of program processes can present challenges.

“I guess I have problems with the timing. We have long sales cycles. You never know when is the best time to get an application in. It would be nice to have a dialogue at SCE to help you strategize that.”

“You never know how long it takes and the variance of the timing. It’s like the lottery – you never know. I sometimes have the customer sign the check over to me, so I’m often the one that’s waiting.”

“The challenge that I’ve experienced was trying to meet the time frame of the process. Certain pre- and post- inspections that need to happen, and a lot of times, it’s a challenge to match those with construction schedules. When things start happening with construction, they don’t want to slow down for inspections.”

Requirement for Hard-Copy Applications

Related to the timing of program processes, vendors of both SPC and Express Efficiency noted that the programs require hard copies of applications with original signatures. Respondents expressed a desire for

online application submission, which would speed up the application process and make program participation more worthwhile for them.

“It’s be great if it could all be done online. We wouldn’t have to go through the time lag for signatures. If it was online, it might be easier.”

“I would recommend that they [allow] scanned and email applications. Right now, it has to be mailed with an inked signature.”

“The one thing I’d like to see is-- they (currently) require wet signatures. It would be nice if we could get electronic approval/signatures from the customer. It would save us a lot of time and energy driving out to the customer location just to get a signature on a form.”

“Forms are daunting and archaic. You can’t submit online. [The program requires] all hard copy and fax submittals.”

Vendors’ Perceptions of Customer Awareness of Programs

Interview respondents were asked whether their customers were generally aware of the incentive programs or if the incentives are something they usually bring to their customers’ attention. As shown in Table 5-1, SPC vendors were more likely to report that their customers at least had some awareness of the program. Half of the Express Efficiency vendors said their customers generally had no awareness of the program, whereas 31% of SPC trade allies said the same of their customers.

Table 5-1: Customer Awareness of Express Efficiency and SPC

Response	Express Efficiency		SPC	
	Freq.	%	Freq.	%
Customers not aware	7	50%	5	31%
Customers are aware	2	14%	5	31%
Some customers are aware, some aren't	4	29%	6	38%
Don't Know	1	7%	0	0%
Total	14	100%	16	100%

Even when customers were aware of the programs, vendors noted that awareness was often vague. The vendor’s role is to inform the customer of the program details, help them understand what qualifies, and help them through the application process. One vendor suggested that larger customers might be more aware of the specifics of the incentive programs than smaller customers.

“It’s probably about 50/50. Most people have heard of it, but don’t realize they’re eligible and don’t know about the specifics.”

“A lot of them are aware that incentives are offered by utilities, but we break down the details for them.”

“Customers are only aware of a program’s existence. Most customers know that SCE has rebates, but they have no clue how to apply or what the incentives can be used for.”

“I would say they are aware for the most part. When I say ‘aware,’ they just know that SCE has incentives. In most cases, it is us that say we will identify incentives.”

“Large customers are [aware]. Smaller people aren’t. They don’t know what to do. They don’t have account reps calling on them to guide them through.”

These responses suggest that customer awareness of the programs could be improved and highlight the important role of vendors in marketing the program to SCE’s customers.

Interestingly, two vendors working with Express Efficiency mentioned that customers do not believe them when they explain the rebates or incentives. This implies that it is important for the customer to get information about the programs from multiple sources so that vendors’ claims about program incentives are credible and/or perhaps points to a need for SCE to provide vendors with program collateral and perhaps establish a more formal partnership program for qualified vendors.

“Most customers don’t believe us -- they don’t believe we’re telling the truth. They think it’s a scam.”

“They are not aware of the program at all unless they have participated before. If I mention it, they think we are trying to trick them.”

Vendors’ Use of BIS as a Marketing Tool

Almost universally, vendors interviewed for this study stated that the primary strength of the program from their point of view is that it helps them sell energy efficient equipment to their customers and that the incentives help convince more customers to complete the sale. Vendors that were involved with both Express Efficiency projects and SPC projects expressed this sentiment. The interview respondents also expressed that not only do the incentives help sell more equipment/projects, but they sometimes view sponsoring applications and procuring rebates for their customers as an additional service to their customers, which projects a positive image after the sale.

“It’s a big bonus when businesses hear that they get some sort of rebate. It helps them make the decision. Most have big jobs – when they find out they get a kickback, it really helps them in the direction of doing the [project].”

“In these tough times, these incentives are excellent to close deals.”

“[Sponsoring applications] helps our business. It lowers the payback and builds value into the product because Edison gives money back for it.”

“We use it as a selling tool. We make the customers aware of the benefits and we take the hit, deducting their invoice by the amount of the rebate. It helps sell what we do. It’s a big marketing tool.”

“[Sponsoring applications is] what we call a value-added service for our customers.”

“It helps us when the client sees us going the extra mile in helping them get what rebate or incentive that we can. It looks good as a business when we help clients get that additional funding.”

Active trade allies – those who had sponsored 10 or more applications for SPC or 60 or more applications for Express Efficiency – noted that the ability to use the programs as a sales tool for their business is the primary factor that has led them to work with so many applications. Express Efficiency vendors, in particular, noted that the rebates allow them to offer some equipment at no cost to the customer, which allows them to sell at a much greater volume. Some vendors went so far as to say that they would not be doing business in Southern California if the rebate programs did not exist.

“It’s our business. We couldn’t operate without it.”

“If it wasn’t for this program, we wouldn’t be doing energy efficient lighting in the Southern California area.”

“I know they won’t buy without the incentive. It really increases sales, and in this case it’s more volume of the sales that helps me make money.”

“With the economy as it is, (the program) helps me a lot. We match the rebate, so the customer gets the product at no charge.”

Support Provided by SCE

To leverage the influential role of trade allies, it is important to examine whether vendors are getting the level of assistance they need from SCE. Some vendors, especially those working with SPC, mentioned that they receive helpful assistance from SCE staff, and that this is a strength of the program. However, others suggested improving the amount of assistance received from SCE, and there were conflicting views on which program offered more assistance with applications. Either way, assistance to SCE was important to vendors when they were getting it, and was desired by vendors that felt they were not receiving adequate levels of support. Respondents’ comments highlight the need for consistent assistance from SCE in completing applications for both Express Efficiency and SPC.

“Seems to be a lot of providing of assistance (for SPC applications). SCE account reps even the analysts.”

“When putting together the energy savings calculations, [the] SPC people will tell us which program is better. [It] hasn’t always been this way.”

“Maybe a more hands-on application person at Edison who follows the installation and applications (would encourage us to work with more Express Efficiency customers).”

“The SPC program does not assist our customers as much as Express.”

How Can SCE Help Market the Program?

Given the importance of vendors in marketing the incentive programs, the vendors interviewed for this evaluation were asked if there are ways in which SCE could market the programs more effectively. As shown in Table 5-2, 50% of SPC trade allies and 79% of Express Efficiency trade allies reported that SCE could market the respective programs more effectively.

Table 5-2: Are There Ways In Which SCE Could Market This Program More Effectively?

Response	Express Efficiency		SPC	
	Freq.	%	Freq.	%
No	2	14%	3	19%
Yes	11	79%	8	50%
No response/ Don't know	1	7%	5	32%
Total	14	100%	16	100%

Vendors offered a variety of suggestions for improvements, including bill inserts, television advertisements, or some other method. Respondents also suggested using account representatives to market and assist with the program, remarking that account representatives are very helpful for the success of the program. Respondents also suggested partnering with trade allies and providing vendor referrals. Finally, they suggested providing marketing collateral to them to provide to their customers.

“Refer customers or contractors to the customer, or make a contract with the vendor/provider.”

“I don't know how much the actual account reps interact with the clients. Maybe they do and I just don't know about it. But it seems that the utility account reps don't really interact much with our clients – not until after we meet with the client has the utility rep really interacted at all to even give them program information.”

“Having the customer's Edison account reps more accessible would be really helpful.”

“I think their field reps could do more to educate their customers. However, I think the field reps really only contact the heavy consumers of electricity. But if the overall program is to reduce energy consumption, it would seem to me that you would do better to get many medium consumers rather than 1 or 2 huge consumers.”

“You need to be able to service those small accounts. Maybe more account reps out in the field to facilitate the paperwork.”

“I think if they start putting packages together – show pictures of things that can be installed with savings information. Include pictures, not words, along with the savings. Edison tends to put pictures of families and things like that. If you're sending information to a business, they want to see the bottom line.”

“(It would help) if there was a flyer that we could present to (the customer). Instead of going over everything with them. It takes a considerable amount of time – most are working and don't have much time, so you can't go into detail on what the benefits are. (We need) something we can present to them. I printed some stuff off the internet, but it's a lot of paperwork, cutting and pasting.”

Summary of Vendor Interview Findings

Vendors working with Express Efficiency applications were more satisfied than those working with SPC applications. Express Efficiency applications were perceived as being easier and faster to complete (although they could be difficult from the customer's perspective). SPC is considered to be more complex. Although SPC is considered more complex, trade allies noted that assistance from SCE was especially valuable and is considered to be a strength of the program. When comparing the two programs, respondents noted that depending on the specific equipment, one program could have a higher rebate than the other, and some equipment is only covered by one of the programs. Vendors working with both programs suggested adding equipment to the list of eligible measures, especially LED lighting. Vendors also complained of the requirement for hard-copy applications, suggesting the program accept applications online.

Trade allies are using the programs as a sales tool. Vendors remarked about the success of Express Efficiency and SPC from a sales perspective. For some, the incentive programs are a key to the success of their business. Not only do the programs influence the customers to complete the sale, they also provide a positive sense of customer service after the sale.

Customer awareness of the programs is vague. Vendors are in a prime position to increase their customers' awareness of the programs and increase participation by using the programs as a sales tool. SCE can help trade allies market these programs to trade allies' customers. It is worth noting that more than one Express Efficiency vendor mentioned that their customers often think the rebate program is a scam made up by the vendor. SCE could help by providing marketing collateral to vendors, or by making their customers more aware of the programs via other means.

One way to increase customer awareness is through the Account Executives. Several respondents noted that account representatives are a valuable resource to the program. They help the vendors through the programs, and the accessibility of account representatives could make or break the program. Vendors suggested Account Executives could approach more of their customers about the programs, and more Account Executives in the field could help serve the smaller customers, not just the large customers.

Expand distribution of program collateral to vendors. Account representatives are also useful for providing collateral material to vendors to help them sell the programs to their customers. In this respect, vendors mentioned that marketing materials that speak to the bottom line would be most effective.

5.2. Insight from Other Market Actors

Even though the vendors represented in the previous section have the closest connection to SCE's customers (and thus have more interaction, influence, and insight regarding customer decisions and experiences with the program) there are other organizations and supply-chain market actors that were interviewed for this study. These groups are considered to be within the circle of influence with customers and are viewed as being potential resources or partners for providing program outreach.

Community-Based Organizations

This section reviews the findings from interviews with organizations working with commercial customers in SCE's service territory. EMI interviewed 14 representatives of various types of organizations have provided insight into what works with partnerships between these groups and SCE, as well as potential opportunities for future collaboration. They have also provided insight into how SCE's energy efficiency programs are viewed among this non-profit community.

Before discussing the findings of the interviews it is important to describe each of these member types and the organizations that work for them.

- **Ethnic Businesses.** Five of the organizations interviewed for this study aim to assist businesses within a particular ethnic business community. The members consist of either Korean, Chinese or Hispanic business communities of a particular region. Three of these organizations were ethnically focused Chambers of Commerce groups. The other two consist of an association targeting Chinese American real estate professionals and another focusing on the entire Chinese business community of Arcadia, CA.
- **Small Businesses.** A few of the organizations interviewed have a mission to help the small business community. The members of these groups are small businesses in general for one group and a specific type of small business community (women-owned businesses and restaurants) for the other two.
- **Contractors and Vendors.** Two of the organizations interviewed focus their activities on contractors and vendors. One of these groups assists contractors, manufacturers, and distributors in Owens Valley. This is the smallest of all the groups interviewed and just initiated its services in January of 2009. The other is a group whose membership is made up entirely of HVAC contractors and vendors.
- **Real Estate/Property Managers.** Three organizations interviewed consist of members of the real estate industry and/or property owners and managers. One of these groups is the organization assisting Chinese American real estate professionals previously mentioned. Two additional organizations also work with this industry.
- **General Business.** A couple of the organizations exist to assist the entire business community either through marketing, promoting, and networking or through assistance with loan and/or certification packaging.

The organizations interviewed for this study vary with respect to the size of their constituency or membership base within the State. The largest organization interviewed in terms of California membership is the California Restaurant Association (CRA), which has over 22,000 members according to one source. Some of the organizations are nationwide as well or have a partner nationwide organization (e.g., CRA and its partner the National Restaurant Association). In contrast, Owens Valley Contractors and Vendors Association consists of only 40 members at this point, though the organization was just established early this year. Overall, in terms of their membership base, the organizations we spoke with are influential to SCE's small commercial customers and the trade allies who work with them.

Interaction With SCE

The interaction and partnerships with SCE among the 14 organizations interviewed was quite varied:

- **Direct Interaction.** Seven organizations said that they are currently or have had worked with SCE in the past. Of these seven, six had some broad knowledge of SCE programs but the knowledge was not specific to BIS or any other particular energy efficiency program. The other organization that had interacted with SCE said that the only programs that the organization had heard about or worked with were HVAC-related. This interaction came in a variety of ways, but usually consisted of 1) a relationship with an SCE account representative, 2) SCE participation in or sponsorship of events, 3) SCE involvement in presentations, workshops or training sessions, or 3) SCE distribution of marketing materials.
- **Interaction with Supplier Diversity Group.** A representative of one organization said they had worked with SCE, not on energy efficiency, but with a different group within the SCE organization (“Supplier Diversity”). This group was also mentioned by another organization as having direct interaction with SCE energy efficiency programs. Interestingly, neither current nor potential future collaboration among the Supplier Diversity group, the organizations interviewed, and SCE energy efficiency programs were suggested or discussed in the interviews.
- **No Interaction.** Five organizations claimed to not have had interaction with SCE. Each of these representatives offered types of partnership opportunities for SCE to consider.
- **Unsure.** One organization was not sure whether they had worked with SCE. This was a very large organization (SCORE) and the person contacted was uncertain about any partnerships between SCE and his organization.

High Level of Satisfaction

Among those that have worked in some capacity with SCE in relation to its energy efficiency programs, satisfaction is extremely high. In fact, every organization that was asked this question (the six with some awareness of the BIS rebate and/or audit programs for businesses) responded with a “5” on a 5-point scale, indicating “very much” satisfaction with their work with SCE. The reasoning behind this high level of satisfaction was centered on the level of engagement with SCE staff. Organizations offered several reasons why they viewed the work with SCE as successful:

“SCE really reached out to us (as well as) the Vietnamese community...had a whole staff of people come out.”

“(The SCE representative) has been great and very useful. She initiated the workshops and we’ve already done about four of those.”

“(SCE) is a very good partner. They are very willing to come out and educate our small businesses.”

“(The members’) experience has been awesome. Cost savings on monthly bills are huge for my companies. Before this, (the members) didn’t even know these programs existed.”

“(The SCE representative) is very accessible. Every time I call him or need something, he never has said no to me. We think SCE’s brand and SCE’s representative attract more guests to our

monthly meeting. I think the program is great, but without a proper person (SCE representative) I'm not sure it would work."

"So far we are very well informed." (This organization and SCE just recently initiated a partnership.)

Important to note is the role the SCE account representatives have played in working with these organizations. However, it is worth mentioning that our sample was drawn partially from a list of organizations already known to work with SCE, with contact supplied to EMI by the account representatives.

Opportunities for Collaboration with SCE

As previously indicated, respondents mentioned several partnership opportunities, which fell into two main categories: opportunities for strengthening an existing partnership and opportunities to begin a new or renew a partnership. Nearly every organization (12 out of 14) interviewed offered at least one idea for such opportunities. The two outlier organizations said that they could not foresee anything more that could be done. These two organizations were extremely satisfied with the involvement and receptiveness of the SCE account representative. There was nothing further for them to offer, as they were already satisfied with the relationship.

The opportunities mentioned by interviewees for strengthening existing relationships between these organizations and SCE include the following:

- More frequent workshops to educating the public and business owners,
- A more open line of communication among SCE, the organization and its community members (specifically the Korean business community),
- Presentations to the membership base, and
- Direct marketing to the members.

The opportunities mentioned by interviewees for beginning or renewing a new partnership between organizations and SCE include the following:

- If SCE would join as a member, they could "email blast" the entire membership about these energy efficiency programs,
- Renewing their membership to bring the programs to other members,
- Speak at a training session to member businesses,
- Speak at a monthly meeting or another meeting for members, and
- Email information to the organization who could then distribute it to the membership opportunity.

Next, we discuss results of the supply-chain market actor interviews, followed by a combined summary of both community-based and supply-chain market actors.

Supply-chain Market Actors

As shown in Table 5-3, the majority of supply-chain market actors (primarily equipment manufacturers and distributors) interviewed for this study characterized their firms as either in lighting (38%) or refrigeration (38%). The size of their businesses ranged from 2 to 56,000 employees, with a median of 200 employees, and a median annual revenue of \$38.75 million.

Table 5-3: Profile of Supply-chain Market Actor Interview Sample

Equipment End Use	Manufacturer	Distributor	Other	Total	Total %
Lighting	1	2	3	6	38%
Refrigeration	4	2	0	6	38%
Compressed Air Components	3	0	0	3	19%
HVAC	1	0	0	1	6%
Total	9	4	3	16	100%
Total %	56%	25%	19%	100%	

“Other” includes two respondents who described their business as both a manufacturer and distributor, and one respondent whose company covers all aspects of the supply chain (manufacturing, OEM, distributing, ESCO, and contracting services).

To determine the extent to which the interviewed firms were influential with respect to SCE’s incentive programs, the evaluation team asked respondents to report whether they manufacture or stock equipment eligible for rebates from SCE. Of the 16 respondents, 13 (81%) reported that at least some of the equipment they manufacture or stock is eligible for rebates from SCE. The remaining respondents were not sure whether their companies’ equipment was eligible for incentives from SCE or not.

Awareness and Interaction with SCE’s Energy Efficiency Programs

Almost all of the supply-chain market actor respondents were at least somewhat aware of SCE’s energy efficiency programs for commercial sector customers, with 56% claiming to be “very aware.” All of the distributors we spoke with were very aware of these types of programs, while manufacturers were more likely to be somewhat aware; two manufacturers reported that they were not at all aware of SCE’s incentive programs.

Greater awareness among distributors is likely due to the fact that they are closer to the end user in the supply chain. Comments from manufacturers show that they feel it is not their responsibility to be aware of rebate/incentive programs.

“(I’m) not at all (aware). Those who would be are my customers.”

“Our distributors are more aware of the various energy rebates.”

“Not very much. We kind of rely on the local distribution to inform us of rebates in a particular market.”

It is interesting to note that all the lighting companies we spoke with were at least somewhat aware of SCE’s commercial-sector energy efficiency programs, whereas two of the refrigeration companies we

spoke with were not at all aware of these programs. There is an opportunity to increase awareness among manufacturers, especially those in the refrigeration industry.

Of the 14 respondents who were at least somewhat aware of SCE's commercial-sector energy efficiency programs, 10 reported that they or someone else at their company had interacted with SCE in some way relating to their energy efficiency programs. Not surprisingly, manufacturers were the only group that indicated they had no interaction with SCE at all. Those who had interacted with staff at SCE generally found this interaction to be valuable:

"The interaction and the emails keep us abreast of what's covered and at what level and such."

"We try to make sure we stay up to date not just with the incentives, but the energy efficiency in general."

Influence of BIS on Manufacturing/Distribution

Respondents were asked to report the extent that SCE's incentive programs have influenced the mix of equipment that their company manufactures or stocks/inventories. Table 5-4 shows manufacturers' responses. Most manufacturers said that the incentive programs had no influence on their manufacturing practices. However, 42% said that the programs were at least somewhat influential.

Table 5-4: Influence of SCE's Incentive Programs on Respondents' Practices

Response	Freq.	%
Not at All	7	58%
Somewhat	2	17%
Very Much	3	25%
Total	11	100%

Some manufacturers said that the rebate programs influence the mix of the equipment that their company produces.

"The rebate money provides a kind of direction for the manufacturer. We actually design here; we know the specs from SCE and other utility companies, (and) we make sure our products and equipment meet the spec."

"The rebate programs do validate that we are focusing on the right areas. California sets the energy standards for the rest of the country."

"Yes, definitely. For example, there is a big requirement for dimmable CFLs; we were able to design one and introduce the dimmable light."

However, other manufacturers felt that the causal relationship was the reverse; these manufacturers felt that SCE looked to them for products that they should incentivize. These companies are at the forefront of energy efficiency standards, and it is part of their mission to manufacture increasingly efficient products and equipment. Others felt that federal standards were driving increases in efficiency more so than utility rebates.

“Not at all...(SCE’s incentive programs) have nothing to do with it. (Efficiency) is our bread and butter product, we started the trend 25 years ago before rebates even started.”

“We push energy efficiency even without rebates. Rebates are icing on the cake.”

“(The incentives) impact sales, but not on the manufacturing side. We don’t need to change our manufacturing to qualify for rebates.”

“The influence is that some of our products are on their list of qualified products. We have distributors who buy our products specifically for that. (But it’s) a very minor part of our business. The influence on our manufacturing process or schedule is nothing of any significance.”

“We try to develop products that drive the programs.”

“We try to make our equipment more effective. But with Title 20, we meet those standards. We already met the standard as they were enacted.”

“We (increased efficiency) at the point in time when it became a federal standard.”

Distributors were asked to report how much SCE’s incentive programs influence the mix of equipment their company stocks or inventories. The results were mixed: three of the five interview respondents indicated that the programs were very influential, while the other two responded “not at all.” (Obviously these results should not be construed as representative of any market due to the small sample.) The extent to which distributors’ business is affected by SCE’s rebate and incentive programs is illustrated by the following:

“Very much, the influence of the rebates is undeniable.”

“If it’s not covered by a rebate, we don’t stock it. It’s 90% of my business.”

Barriers to Customer Participation

When asked to report the primary factors that prevent the market from demanding higher efficiency equipment, not surprisingly, the overwhelming response was “cost.” Manufacturers and distributors alike mentioned that customers also want reliability and efficiency, but cost was a limiting factor. These comments parallel results of the participant surveys/interviews, and validate the importance of financial incentives, especially in the current slow economy.

“Cost, price tag is the biggest barrier. We have to do a lot of educating our customers in energy and cost savings over time. We do use the rebates as a sales tool every chance we get.”

“The customers won’t do it unless they’re driven to. They are concerned about the upfront costs.”

“Rebates or incentives help them choose equipment that’s energy efficient, but the customers are price sensitive. The discounts drive this market.”

“The incentives through utilities are definitely helping. Customers who otherwise can’t afford it will take advantage of the rebates and slow down their electric meters.”

Other barriers mentioned include language, lack of awareness, and misinformation.

“Language can be a huge barrier, especially in our area. There are trust issues as well as communication challenges related to language. The ability to communicate with people in their native language encourages participation and trust in the programs. Finding people who the non-English-speaking end-user can work with is a part of that challenge.”

“The market is not really aware of what is available. It’s more the manufacturers trying to make it more efficient due to competitive pressures.”

“Perception that the product won’t perform. That the doors will sweat or fog. Or that it might take too much time to clear.”

Opportunities for working with SCE

Some of the barriers to customer participation mentioned above could be overcome by getting information out to SCE’s customers about BIS programs while simultaneously providing information regarding return on investment, awareness of energy efficient equipment, and clearing up misinformation about energy efficient equipment.

Most of the supply-chain market actors we spoke with were at least willing to consider working with SCE in order to get information about rebate and incentive programs to their customers and others in the supply chain.

“I think that’s definitely something where we see opportunities. Our customer base already focuses on rebates, but it would create additional awareness or benefit.”

“We take any help we can get. We don’t see the end users here, but if we have info we can hand to the dealers’ sales people, that would help.”

“Absolutely, yes (I see opportunity for partnering with SCE). And it’s just because it makes sense.”

“Yes, it’s always welcome to do that. We partner with Edison with some other programs. I think that would be beneficial.”

“I don’t know – I would have to think about partnering with SCE – how to bring it together from a marketing perspective. How does it reach the right people on both sides? Generally, I would say yes, there is a way to do business together.”

“Absolutely. We would definitely (market SCE’s programs to our customers). Even to the distributors.”

When asked about the best way for SCE to get information about their rebate/incentive programs to other companies and organizations in the supply chain, respondents offered a variety of suggestions:

- Email,
- Internet/SCE’s web site,
- Personal meetings between SCE reps and manufacturers/distributors,
- Mailings to plant managers and plant engineers, with case studies,

- Provide program collateral to manufacturers for use with manufacturers' customers,
- Focus on the energy contractors to help sell and complete the forms,
- Advertise in trade journals, and
- Printed information distributed through the various chambers of commerce.

Again, these supply-chain market actors expressed willingness to partner with SCE in developing and executing program outreach initiatives:

"Edison (should) send me information that I can share with my customers, so that they can promote the program to the store owners."

"In general the best way to get info out is kind of by focusing on the energy contractors as much as the end users. End users look at the rebate and don't know what to do with it. The ESCO can put together a consolidated package for the end-user."

"Have reps come out and talk to us about the programs. If someone calls me, I don't know enough about it. But if someone from Edison came to talk to us so we can inform the customers who buy it from us....email me the information. It has to go to the right person for it to do any good."

"Start communicating with the vendors and reps like me. Especially in regard to the walk-ins (coolers). That market may not be as big as the reach-ins, but should not be overlooked."

These sentiments are not meant to imply that SCE is not undertaking the types of outreach suggested by the market actors interviewed for this project. The interview sample is very small, and it is possible that the companies interviewed for this study have not been exposed to any of SCE's outreach efforts. Their insight and suggestions, however, do suggest outreach opportunities for SCE to explore and expand.

Summary of Market Actor Interview Findings

Community-based organizations provide an opportunity for program outreach. Interviews with market actors such as organizations serving small businesses suggests that working together with such groups may be a powerful tool for getting information about SCE's programs out to SCE's customers. Our interviews with organizations that SCE is currently partnering with suggest that these partnerships are effective, and the participating organizations are highly satisfied with these partnerships. SCE is reaching a wide variety of potential customers who otherwise would not be aware of or participate in SCE's programs. The role that SCE account representatives have played in working with these organizations is paramount.

Partnerships with market actors are viewed as welcome and effective. Partnerships with SCE are viewed as beneficial in terms of increasing knowledge of rebate/incentive programs among organizations working with small businesses. While supply-chain market actors, including manufacturers and distributors, were not generally partnering with SCE on BIS programs, interviews revealed an opportunity for doing so. Some manufacturers (particularly refrigeration manufacturers) were not aware of SCE's rebate/incentive programs, which present an opportunity for SCE to target manufacturers more to educate them about program offerings, and perhaps even use manufacturers as a marketing tool. Most supply-

chain respondents were at least willing to consider partnering with SCE to market their products/equipment as eligible for rebates from SCE.

Most supply-chain market actors feel the primary barrier to customer participation is cost.

Respondents overwhelmingly named up-front cost, including labor costs, as a prohibitive factor for some businesses' purchase of energy efficient equipment. Thus, financial incentives are an important component of the BIS Program. Other barriers mentioned by supply-chain market actors included language barriers, lack of awareness, and misinformation. SCE's current partnerships with community-based organizations appear to be an effective antidote to such barriers, and SCE is encouraged to continue to expand such partnerships.

6. LOOKING INWARD: INSIGHT FROM SCE STAFF AND THIRD-PARTY REVIEWERS

The final perspective offered by this process evaluation is inward looking at the various divisions and processes within SCE's organization that collectively supported the administration and implementation of the 2006 – 2008 BIS program. The original intent for this portion of the evaluation was to document various program delivery processes and assess the overall operational efficiency of the program. The focus of this portion of the research changed significantly early in the study after the evaluation team became aware of 1) the significant restructuring that SCE had already begun, and 2) the recent staff turn-over as a result of which a lot of institutional knowledge of the 2006 – 2008 BIS program was lost. The focus of this portion of the research then shifted to soliciting insight from staff on areas in need of improvement that related to aspects of the program delivery with which they were involved.

The interview results summarized below provide less value to the 2006 – 2008 process evaluation itself than originally planned, but the insight gained from SCE staff provided extremely valuable in establishing the process evaluation priorities and understanding the context of the organizational shifts SCE was undertaking at the time of this research. The interviews and follow-up discussions and correspondence with some staff also helped SCE identify research questions and immediate needs for support that were out of the scope of this study but were viewed as important to SCE to support the development of its 2010 – 2012 programs. The results of two such efforts, in particular, are 1) the supplemental research into the small business market that is summarized in Volume II of this process evaluation report, and 2) a separate business process review and optimization of the calculated/custom incentive application process.

Key observations from the interviews that are relevant to this process evaluation are summarized below.

1. SCE is restructuring the BIS programs that will provide energy efficiency products and services that are aligned by and specific to key market segments. This restructuring was initiated before the process evaluation research began, based on internal re-evaluations of the 2006-08 program delivery model.
2. Program tracking systems and information management are critical to the operational efficiency of the BIS. SCE conducted a gaps analysis and will be developing new systems as part of its restructuring process.
3. Regulatory and ad hoc reporting are strong drivers of the internal operations of SCE's energy efficiency division. In many respects, the regulatory agency is the primary customer of the utilities energy efficiency division instead of the "real" customers, themselves.
4. Even though *integration* is a defining characteristic of the BIS Program compared to the stand-alone program approach of previous program cycles, the extent that of audit services, Emerging Technologies, and Demand Response programs were integrated with the BIS appears to be limited. This is due to many institutional and organizational barriers that impede the effective tracking and sharing of information and data between groups and across programs.

In addition to the interviews with SCE staff, the evaluation team conducted telephone interviews with representatives of three engineering firms responsible for conducting reviews of applications for the SPC and Express Efficiency programs. The interview respondents primarily review calculations for SPC incentive applications, but will also review Express Efficiency measures if they are included in a

combined application. These firms also conduct pre- and post-installation inspections at customer sites. The results of these interviews are collected into four categories:

- **Support from SCE.** Engineering reviewers commented on the exceptional support they receive from SCE staff. All the reviewers we spoke with have regular contact with SCE, including daily emails, weekly phone calls, and monthly status update meetings. SCE contacts help answer questions regarding application reviews and are easy to work with. Communications are smooth and effective, which helps move applications forward.
 Respondents also noted that SCE's internal engineers are more accurate with calculations than third-party vendors (who are motivated to inflate the incentive estimates). Some project sponsors are perceived as not being sophisticated enough in their calculations (they use rules of thumb instead of established valid assumptions).
 Finally, the respondents noted that staff turnover at SCE has been high recently, and contacts have been changing. Thus, reviewers were not always certain who to contact for certain questions, although they commented that this has improved recently. Respondents noted that with the new market segment approach, there is a need to have roles and responsibilities at SCE outlined. Reviewers prefer to have a single contact at SCE.
- **Application Review.** Engineering reviewers download customers' submitted applications as PDFs from an FTP site. However, customers do not always submit all parts of the application at once. In fact, one respondent noted that only 10% of uploaded applications are completed and ready to be reviewed on the first submittal.
 - Respondents suggested that the account executives be trained to know what will pass the reviewers' evaluation so that they can work with the customers on the front end to submit accurate applications. One reviewer suggested there be a technical person at SCE act as a preliminary screener for applications before they get sent to the engineering reviewers.
 - Reviewers conveyed frustration that applications are often not just incomplete, but are only provided to them in a non-interactive PDF format. The engineers thus do not have access to the Excel documents used to compute the calculations; they cannot access the formulas to determine how the calculations were performed. Engineering reviewers expressed a desire for complete applications with access to calculation spreadsheets.
 - Additionally, respondents noted that the SPC program manual/program guidelines are sometimes subject to interpretation. The third-party reviewers have now begun to meet regularly to discuss interpretations of the program guidelines and share results between reviewers to ensure they are interpreting them in a consistent manner. However, there is room to clarify calculation assumptions and program guidelines.
- **Program Tracking.** Reviewers commented that SCE currently uses a separate spreadsheet for tracking the status of applications. The engineering reviewers keep their own separate tracking spreadsheet, and this can sometimes cause discrepancies in project status tracking. There is a desire for greater consistency between the tracking systems so that work can be more efficient. Currently, reviewers can spend a good deal of time going between the different tracking systems to verify project status.
- **Customer Experience.** Engineering reviewer respondents emphasized that customers want their incentive checks very quickly. The way to decrease the timeframe is for the paperwork

to be reduced or streamlined. Respondents noted that if the program is kept simple from the customer's perspective, and they understand how to complete the application, then the engineering reviewers' jobs will go much more smoothly, and the entire process will smoother and quicker. The customer will get their check faster and customer satisfaction and third-party reviewer satisfaction will only improve.

7. SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

This process evaluation assessed a variety of aspects of SCE's 2006 – 2008 BIS program, including the achievement of goals associated with the aspects of program design, the operational efficiency by which energy efficiency services are provided to program participants, and the extent to which Express Efficiency, SPC, and NRA were integrated into a unified outreach and delivery strategy. This evaluation characterized the program from two perspectives – as a result of customer experiences and how the program has and might interact with the broader marketplace in the future.

It is important to acknowledge here that this process evaluation placed more emphasis on identifying areas in need of improvement to support the 2010 – 2012 rather than documenting the delivery of the 2006 – 2008 program.¹⁸ The need for improvement should not be interpreted as program failure. Overall, the BIS program fared well. The process evaluation identified areas of the program delivery that did not work well for some customers, and as a result, incentive applications (i.e., energy savings) were never submitted, were rejected, or expired and were never resurrected. Collectively these projects represent a lost opportunity for energy savings that could be significantly reduced with a combination of organizational, business process, and information management improvements. SCE is already undertaking a significant restructuring of its energy efficiency division and optimizing its business processes; the findings and recommendations provided below can inform those efforts.

7.1. Key Process Evaluation Findings

The following eight key findings were distilled from the process evaluation research and analysis presented in the preceding sections of this report.

Finding #1: Participant and Vendor Satisfaction with the Program is High.

Across all data sources, program participants and vendors that sponsored incentive applications on behalf of SCE's customers were very satisfied and had good experiences with the program. Audit participants were very satisfied with the professionalism of the auditors, including their knowledge of the business' equipment needs, their courteous manner, and providing valid identification and credentials. Express Efficiency and SPC customers are highly satisfied with the high efficiency equipment for which they received an incentive, and Express Efficiency and SPC participants were also very satisfied with the knowledge and level of support provided by SCE staff. Vendors that sponsored applications were generally satisfied with the programs; satisfaction was higher for those working with Express Efficiency applications, compared to those working with the more complex SPC applications.

¹⁸ Here it is relevant to comment on the need to evolve the evaluation approach along with the evolution of the program approach. The change from a one-year program cycle to a two-year program cycle (2004-05) and then a three-year cycle (2006-08) was not accompanied by a change in the evaluation design. A single program evaluation project has now evolved into a multi-phased approach for 2010-2012; the 2006-08 project should also have been multi-phased.

Finding #2: The Level of Integration of the 2006 – 2008 BIS Program Components into a Unified Strategy is Low.

An important feature of the 2006 – 2008 BIS program that distinguished it from past program cycles was the intent to provide a single unified portal for providing a suite of energy efficiency products and services to SCE's nonresidential customers. EMI examined the extent to which the integration was successful from several perspectives in this process evaluation. First, the analysis of program tracking data revealed a low percentage of cross-participation between the NRA program and the incentive programs, indicating that only 8% of the audit participants had moved on to participate in the incentive programs. Second, audit participants were overwhelmingly unaware of Express Efficiency and SPC. The participant survey showed that 65% of Audit participants were not aware of Express Efficiency, and 78% were not aware of SPC. These results were underscored by results of participant in-depth interviews with small-business audit customers (an even larger percentage of which were not aware of the incentive programs).

The significance of this finding cannot be understated. First, there is a *significant lost opportunity for measurable energy savings* associated with audit participants that do not implement energy efficiency improvement projects and apply for incentives through SCE's program. Second, there is evidence of organizational and information system barriers that appear to pose significant obstacles to building a unified delivery strategy that offers end-to-end energy efficiency solutions. (These are discussed as separate findings below.)

Finding #3: Many Discontinued or Expired Applications Represent Lost Opportunities for Energy Savings.

The insight provided by customers with discontinued or expired applications revealed that many of these applications could have been resurrected if SCE was more attentive to assisting the customer to take corrective action. In many of the cases covered by this process evaluation, there does not appear to have been consistent "one-on-one" follow-up with customers to either alert them that an application had been rejected, discontinued, or expired and/or walk them through the process for resubmitting the application.

Finding #4: The Application Process is Considered to be Complex, and the Transaction Costs of Participation are Prohibitively High to Some Customers.

The complexity of the application process, particularly for SPC, was a top concern for customers and vendors alike, and is directly related to customer dropout from the incentive programs. Some customers or trade allies that encountered difficulty with the application decided at a certain point that the effort they have put into the application process exceeded the value of the financial incentive they may received. This was especially evident in interviews with small business near-participants, who may lack the staff resources to devote to the application process, and who expressed a desire for more assistance.

Finding #5: Partnerships with Community-based Organizations Are an Effective Avenue for Program Outreach to the Small Business Sector.

Representatives of community-based organizations and agencies interviewed for this study were overwhelmingly satisfied with the partnerships forged with SCE to support the utilities' program outreach efforts. Supply-chain market actors such as manufacturers and distributors noted that reaching small businesses can be difficult when language barriers exist or when the customer is uninformed or

misinformed. There are other well-documented barriers for improving the energy efficiency in the small business sector that the core BIS programs do not appear to have overcome, such as the split-incentives barrier. However, from the CBO perspective, SCE's existing partnerships with CBOs are helping to overcome these barriers because small business owners rely upon and trust these organizations for a variety of business- and community-related support. The extent that SCE is viewed as a partner with these organizations has and will continue to help SCE better serve the small business community.

Finding #6: Vendors Use the Program as a Marketing Tool for their Business.

Vendors see tangible value in promoting the incentive programs to their customers. Nearly all vendors interviewed for this study claimed to use the program as a marketing strategy to sell high efficiency equipment to their customers. Some vendors have leveraged their involvement with the program to build a positive image with their customers after the sale is complete. Either way, the benefit of working with the program from the vendors' perspective is significant. SCE benefits because vendors are helping to market the program and facilitate customer participation, thus the relationship between SCE and vendors who sponsor customer applications is mutually beneficial.

Finding #7: SCE Account Representatives Play A Vital Role in Program Delivery.

The overwhelming majority of program participants learned about the program through an SCE representative. Not only are account representatives influential in increasing program awareness among customers, but assistance and follow-up from account representatives help customers get the technical support they need to complete applications in an accurate and timely fashion. Likewise, vendors sponsoring applications seek support from SCE staff to accurately complete and submit applications. Communication and follow-up from account representatives can help customers better understand why applications have been rejected and can help them identify the next steps for participating in the program. The customer research showed that those who were satisfied had good contacts at SCE to help them through the process, and those who were dissatisfied did not. *This finding — that an expensive marketing channel is responsible for a significant portion of the program participation — should be a signal that SCE needs to improve the self-service channels.*

Finding #8: Certain Components of the BIS Program Continue to Present Challenges.

The review of the 2002, 2003, and 2004-2005 evaluations for the three BIS program components found that, while the program has made great strides in responding to several areas for improvement, a handful of challenges have remained elusive over the years. Namely, this set of programs has struggled to streamline the application process, provide more technical support to SPC customers, provide consistent application requirements for SPC projects, use the NRA to market the incentive programs, update the NRA tracking database, and follow up with NRA participants. All of these recommendations occurred in more than one prior evaluation, and EMI's research suggests that all of these areas exhibit need for improvement. Based on these earlier evaluations and its own internal reviews during the 2006 – 2008 program, SCE is currently working on many of these issues, including streamlining the application process and updating program tracking databases.

Some recommendations that appeared more than once in prior years' process evaluations appear to have been successfully addressed by SCE, including allowing larger customers to participate in Express Efficiency, marketing the programs through vendors and providing vendors referrals, tailoring the audit to the customers' business, and collaborating with community-based organizations. While our analysis

shows that 57% of SPC savings are attributable to industrial customers, 19% of NRA savings are attributable to industrial customers, suggesting that prior years' recommendations to focus on industrial customers have been met, but the NRA could continue to increase this focus.

7.2. Recommendations

EMI offers the following set of recommendations to support SCE's ongoing program improvement initiatives.

Recommendation #1: Minimize Lost Savings Opportunities by Using Audits as a Resource for Marketing the Incentive Programs

One of the most significant key findings of this process evaluation is the Audit program's participants' low awareness of SCE's incentive programs and the low percentage of NRA participants that also participated in one of the incentive programs. To the extent that SCE has already invested resources into identifying energy efficiency improvement opportunities and informed customers about these opportunities, audit participants that are neither aware of or participate in the incentive programs are a lost opportunity for measurable energy savings. Moreover, to the extent that the audit participants have already expressed an interest in energy efficiency by their mere participation in the program, *the audit participant population should be viewed as the highest priority target market for the incentive programs.*

The interviews with SCE staff, third party engineering reviewers and other stakeholders provided a glimpse into why such integration has not been achieved thus far. This process evaluation and the separate business process optimization study of the calculated/customized processes reveal that there are many institutional and organizational barriers with the SCE organization that need to be overcome before such integration would be possible. The majority of institutional barriers seem to be related to the lack of an integrated information management system that would enable the easy access and seamless transfer of customer information, audit results, and incentive application documentation between all departments and stakeholders that need such information to do their jobs effectively and efficiently. This is not a trivial matter, and SCE should be credited with starting down the road of first understanding its existing processes and business requirements, and with beginning to address it a year ago.

Recommendation #2: Establish a Formal and Systematic Process for Providing Support to Customers that "Stall" in the Program.

Most of customers were satisfied and had a positive experience with the program. However, customers understandably expressed disappointment and frustration when their incentive application expired or was repeatedly rejected and they claimed to have not received adequate support from SCE to remedy the issue. Customers who were satisfied with the program had good contacts at SCE to help them through the process, while those who were dissatisfied did not receive adequate assistance from SCE.

This reveals an opportunity to create a systematic approach to customer relations and assistance with applications. Offering consistent customer support will allow SCE to capitalize on customers with whom SCE has already invested resources by preventing them from falling out of the program. Lost opportunities for energy savings and customer disappointment can be avoided by having Account Managers or other SCE staff designated with the responsibility of regularly following-up with customers

that have initiated but not completed applications, participated in audits but not applied for incentives, or had applications rejected because of application errors or lack of program funding. Furthermore, a system for following up with Audit participants to provide guidance is paramount to the success of funneling Audit participants into the incentive programs.

Such “hand holding” might be viewed as too costly and might require the development of a new support function dedicated to SCE’s Energy Efficiency Division (particularly for smaller businesses). However, the cost of not doing anything for customers that have “stalled” in the program might be even higher, considering the resources that SCE has already invested (conducting an onsite audit, application review, etc.) and the savings that might result from the incremental investment of the “hand holding.”

Recommendation #3: Streamline and Reduce the Application Review and Processing Time.

The complexity of the incentive applications turns some customers away from program participation, and a review of the ease of application for both incentive programs is warranted.¹⁹ Not all customers expressed having difficulty with the application, but results were not overwhelmingly positive with respect to the application process (from either the customer or venter perspective). There are many research methods that could be employed to learn how customers complete the application materials and to identify specific areas that might be causing difficulty. Observing customers as they complete the application and verbalize their thoughts (“think alouds”) could be very revealing and valuable, particularly for the small business customers that are not as likely to have a vendor working with them to complete the application for them. It is important to acknowledge here that there already is a task force that has been working for over a year to redesign an “Integrated DSM Application.”

A corollary to this recommendation is the suggestion that SCE consider the discontinuation of its wet signature requirement. SCE is encouraged to consider the feasibility of additional online application components and at a minimum allow faxed or scanned signatures. Vendors reported that allowing faxed or scanned signatures would save considerable time and speed up the application process by avoiding making special trips to the customer’s facility just to get a signature for the application. (This is of course exacerbated if there are application errors and a new application needs to be developed.)

Recommendation #4: Continue and Expand Efforts to Develop Partnerships and Synergies with Local Governments, Community-Based Organizations, and Trade Organizations.

SCE’s efforts to work with CBOs and trade organizations appears to be successful and mutually beneficial, and should be continued and expanded. Particularly for hard to reach and “niche” customer segments (small business, restaurant, ethnic communities), and partnerships with local organizations are an effective means of program outreach.²⁰

Recommendation #5: Review and Document the Program Theory and Logic

EMI’s review of the PIP concludes that the program theory for the 2006 – 2008 BIS is not explicitly documented. This is not a critical failure for the program, since SCE is well underway in developing the

¹⁹ SCE is currently undergoing changes in streamlining the application process for the 2010 – 2012 program cycle.

²⁰ See Volume II of this report for more information regarding barriers faced by small business customers.

delivery strategies for its 2010 – 2012 programs. The recommendation here is that SCE review and refine the program theory and logic for the upcoming program cycle. The theory should explicitly document the rationale for the program design and should define the key activities, outputs, and the desired short and long-term outcomes. The logic model will visually illustrate the linkages between the activities and defined outputs and outcomes. Articulating the theory and outlining the program logic serves several purposes. Mainly, it will provide solid grounding for why the program(s) are designed as such. The program rationale and logic will serve as the anchor point upon which any program modifications and future evaluation research can be based and designed more effectively to assist SCE in understanding why certain aspects of program delivery were or were not successful.

Recommendation #6: Develop Key Performance Metrics.

After the program theory and logic are documented, EMI recommends that SCE develop sets of key performance metrics upon which progress toward SCE's internal goals of success can be tracked and measured. (Naturally, the development of key performance metrics is predicated upon the fact that SCE has or will establish goals for program achievements, beyond the overarching energy savings and demand reduction goals.)

Performance metrics should be established for all levels of SCE's Energy Efficiency Division and other divisions and groups that have responsibility for and support the delivery of its energy efficiency programs. Such metrics should be reflective of each group's underlying mission as well as its responsibilities with respect to the successful delivery of the energy efficiency. Examples of such metrics include (but are certainly not limited to): customer/participant satisfaction, production rate, incidence of application rejection, the portion of applications that are expired/withdrawn, SCE staff satisfaction, cost effectiveness, and application processing time.

Once established, SCE should establish the means for tracking the performance metrics over time on a regular basis. Generally, performance metrics are incorporated in management-level reports that are updated on a weekly, bi-weekly, and/or monthly basis.

A. DATA COLLECTION SUMMARY

A.1. Overview

Table A-1 provides a summary of the various primary data collection efforts completed to inform the results of this process evaluation. Surveys were conducted with 301 program participants to obtain customer feedback and insight on experiences with the BIS programs. In-depth interviews were conducted with 50 NRA-only participants to learn more about the population of customers for which the audit had apparently not influenced participation in one of the incentive components of BIS. Similarly, 30 in-depth interviews were conducted with program near-participants, those who had initiated but not completed an application for incentives, to learn the circumstances that prevented these customers from completing applications for incentives.

EMI completed 30 in-depth interviews with vendors that sponsored customer applications for Express Efficiency and SPC in order to gauge vendors' satisfaction with the programs and determine the extent to which vendors are helping SCE market the program. The 30 interviews with market actors included 16 interviews with supply-side market actor and 14 interviews with community-based market actors. These interview were conducted in order to assess the extent to which the BIS program influences manufacturing and stocking practices, assess current community-based partnerships, and determine opportunities for partnering with various market actors to increase program outreach efforts.

Finally, interviews were completed with 14 SCE staff and contractors, including interviews with program staff that were completed at the onset of this evaluation, including staff from SCE's Business Customer Division, Business Solutions, and its third-party engineering reviewers. These interviews were conducted in order to frame the evaluation plan, define the status of the BIS program, and solicit suggestions for program improvements.

Table A-1: Data Collection Summary

Source	Key Objectives	Completed Sample
Participant Survey	<ul style="list-style-type: none"> – Characterize customer experiences with SCE’s BIS program and the adequacy of support provided by SCE and its representatives. – Determine the effectiveness of the NRA program in promoting Express Efficiency and SPC. – Characterize the extent that the BIS program components are integrated in program delivery. – Solicit recommendations for program improvements. 	301
Participant In-depth Interviews	<ul style="list-style-type: none"> – Determine why Audit participants may not go on to participate in Express Efficiency or SPC. – Determine whether NRA-only customers are implementing any of the Audit recommendations. 	50
Near-participant In-depth Interviews	<ul style="list-style-type: none"> – Determine the primary reasons why customers’ applications were discontinued. – Determine whether any firms with discontinued applications go on to participate later. – Of those that do not go on to participate later, determine what prevented them from participating. 	30
Vendor In-depth Interviews	<ul style="list-style-type: none"> – Gauge vendors’ satisfaction with the SPC and Express Efficiency programs. – Determine the extent to which vendors are helping SCE to market and implement the programs. 	30
Market Actor In-depth Interviews	<ul style="list-style-type: none"> – Obtain perspectives on program design and operation from various perspectives, including supply-side market actors and community-based organizations. – Supply-chain market actors: 1) Determine whether the BIS program has an influence on the manufacturing or stocking practices of equipment manufacturers/distributors. 2) Determine opportunities for disseminating information regarding energy efficiency program offerings through manufacturers/distributors to their customers. – Community-based market actors: 1) Determine the extent of awareness of BIS among local organizations (including CBOs, economic development associations, ethnic business associations, chambers of commerce, and trade associations), 2) Determine the extent that the BIS programs successfully utilized a “local community involvement approach,” and 3) determine potential for partnering with/leveraging such organizations to increase outreach efforts at the local level. 	30
SCE Staff Interviews	<ul style="list-style-type: none"> – Identify important topics to be explored during the evaluation – Determine alignment between program objectives and program activities – Determine status of previous recommendations – Characterize staff experience with the BIS program – Solicit suggestions for program improvements 	14

The remainder of this Appendix provides details for each data source specified in Table A-1.

A.2. Participant Telephone Survey

This section describes the objectives, sample design, and respondent characteristics for the program participant telephone surveys.

Participant Survey Objectives

Surveys were conducted with 301 BIS program participants who had participated in one of the three BIS components - Express Efficiency, Standard Performance Contracting (SPC), and Nonresidential Audit (NRA). The objectives of these surveys were to provide a characterization of customer participation experiences, determine the extent of program integration and effectiveness of the NRA program in promoting Express Efficiency and SPC, and to solicit recommendations for program improvements.

Participant Survey Sample Design

The sampling objectives for this research effort were to select a representative sample of program participants that would enable the evaluation team to obtain perspectives on each of the three BIS components. EMI sought to use proportional sampling with program and customer size as sample stratification variables. Market segment and business type were other stratification variables that EMI considered, but this information was not readily available for a significant percentage of sites.

EMI requested and obtained program participation data and customer billing frame data from SCE. The billing data were merged with program tracking data (by one or more customer service account numbers) to enable EMI to summarize program data by customer summer peak demand use segments. The designated demand segments are Very Small (0-19 kW), Small (20-99 kW), Medium (100-488 kW), and Large (500+ kW). These size categories were established by SCE for most customers prior to this evaluation effort and are determined by the three highest kW readings in a 12-month period.

EMI developed a preliminary sample frame database after cleaning the data for missing and erroneous observations. The resulting preliminary sample frame data is summarized in Table A-2. For each program component and for the entire BIS program, this table summarizes total tracked annual kWh savings and the percent of the total annual kWh savings represented by each strata.

For this evaluation, the goal was to complete a total of 300 telephone surveys. The third numeric column of Table A-2 provides the preliminary sample target that was approximately proportional to the percent of total kWh savings (the exceptions being that sample points were not assigned to the “missing customer size” category and that 33 surveys were shifted from SPC to Express participants). As shown, EMI proposed completing 141 of the 300 surveys with Large customers, 113 with Medium customers, and 46 with Small and Very Small customers. With this sample design, nearly two-thirds of the sample was devoted to SPC participants, 26% with Express participants, and the remaining 12% with NRA participants.

Table A-2: Participant Telephone Survey Sample Design

Program/Customer Size	Sum of kWh Savings	% of Total Savings	Sample Target	Percent of Target
Total BIS	1,031,355,580	100%	300	100%
Very Sm & Sm (0-99 kW)	177,366,271	17%	46	15%
Med (100-499 kW)	312,943,509	30%	113	38%
Large (500+ kW)	527,643,764	51%	141	47%
Express Efficiency Total	149,077,659	14%	77	26%
Very Sm & Sm (0-99 kW)	39,255,249	4%	19	6%
Med (100-499 kW)	68,316,921	7%	40	13%
Large (500+ kW)	39,496,436	4%	18	6%
SPC Total	761,342,249	74%	188	63%
Very Sm & Sm (0-99 kW)	114,367,764	11%	20	7%
Med (100-499 kW)	158,262,728	15%	48	16%
Large (500+ kW)	477,318,774	46%	120	40%
Nonres. Audit Total	120,935,672	12%	35	12%
Very Sm & Sm (0-99 kW)	23,743,258	2%	7	2%
Med (100-499 kW)	86,363,860	8%	25	8%
Large (500+ kW)	10,828,554	1%	3	1%

Because the greatest number of surveys was to be completed with the Large SPC cell, which had the smallest sample size, the sample design for this effort effectively oversampled the SPC customers. In particular, customers that had participated in SPC in addition to NRA and/or Express Efficiency were flagged to be asked questions about SPC rather than one of the other programs.

Table A-3 shows the available sample. It is apparent that the available sample for SPC was relatively small compared to the targeted number of completed surveys. For large SPC participants, the goal was to complete 120 surveys out of 358 available contacts (a ratio of about one-third), which is a relatively ambitious goal.

Table A-3: Participant Survey Sample Frame

Program/Customer Size	Sample Target	Final Sample Frame (Unique Customers)
Express Efficiency Total	77	3,496
Very Sm & Sm (0-99 kW)	19	2431
Med (100-499 kW)	40	818
Large (500+ kW)	18	247
SPC Total	188	723
Very Sm & Sm (0-99 kW)	20	109
Med (100-499 kW)	48	256
Large (500+ kW)	120	358
NRA Total	35	8,598
Very Sm & Sm (0-99 kW)	7	5231
Med (100-499 kW)	25	3152
Large (500+ kW)	3	215

The evaluation plan for this study specified an in-depth interview sample of 50 program participants. Data Development Worldwide (DDW), an experienced marketing research firm based in Philadelphia, administered surveys. Before sending the sample data to DDW, EMI removed 100 customers who had participated in NRA plus one of the incentive programs. This was so that these customers would be available for participant in-depth interviews. (However, EMI and SCE ultimately decided to focus participant in-depth interviews on NRA-only customers.)

Participant Survey Respondent Characteristics

Table A-4 shows the number of completed surveys for each of the sample strata, with a total of 301 completed surveys. As shown, 91 large SPC surveys were completed before the sample was exhausted. Thus, the remaining 29 surveys were completed with NRA participants.

This section provides a description of the sample characteristics, including general customer background (i.e., type of business, number of employees, etc.) and cross-participation. We first characterized the respondents' businesses in terms of primary business activity, roles, and tenure of the respondents, facility ownership, and location of the company's headquarters.

Table A-4: Completed Participant Surveys

Program/Customer Size	Completed Surveys	% of Total
Total BIS	301	100%
Very Sm & Sm (0-99 kW)	49	16%
Med (100-499 kW)	132	44%
Large (500+ kW)	120	40%
Express Efficiency Total	78	26%
Very Sm & Sm (0-99 kW)	19	6%
Med (100-499 kW)	40	13%
Large (500+ kW)	19	6%
SPC Total	159	53%
Very Sm & Sm (0-99 kW)	20	7%
Med (100-499 kW)	48	16%
Large (500+ kW)	91	30%
Nonres. Audit Total	64	21%
Very Sm & Sm (0-99 kW)	10	3%
Med (100-499 kW)	44	15%
Large (500+ kW)	10	3%

Table A-5 shows the primary business activity of survey respondents. Almost 40% of respondents were involved in an industrial process, manufacturing, or assembly business. About 10% each were office buildings or were involved in warehouse/distribution. The “Other” category, comprising about 7% of respondents, included such diverse activities as a casino, health club, and radio broadcasting facility.

Table A-5: Primary Business Activity of Participant Survey Respondents

Primary Business Activity	Frequency	Percent
Industrial process/manufacturing/assembly	117	39%
Office	29	10%
Warehouse/distribution	28	9%
Other	22	7%
Hotel or motel	19	6%
Retail (non-food)	18	6%
Community service/church/temple/municipality	17	6%
Health care	9	3%
School	9	3%
Restaurant	8	3%
Utility provider	8	3%
Hospital	6	2%
Condo assoc./apartment mgr.	5	2%
College/university	2	1%
Grocery store	2	1%
Construction	1	1%
Refused	1	1%
Total	301	100%

The number of employees at respondents' businesses ranged from 1 to 12,000 employees. The mean response was 320 employees, and the median was 50; there was quite a bit of variance in the number of employees, and the responses to this question were positively skewed.

As shown in Table A-6, respondents were primarily facility managers, energy managers, or employed in upper management. Respondents had held their job positions for an average of 9.5 years. This implies that the respondents were very knowledgeable about their business and their industry, in general.

Table A-6: Job Titles of Respondents

Job Title/Description	Frequency	Percent
Facility/operations manager	87	29%
Energy manager/engineer	52	17%
Owner/president/CEO	46	15%
Other (please specify)	43	14%
General manager/regional manager	32	11%
Vice president/VP of operations	29	10%
Maintenance manager	12	4%
Total	301	100%

Table A-7 shows that roughly two-thirds of respondents owned the facility housing their business, and Table A-8 shows that over 70% of respondents' businesses are headquartered in Southern California.

Table A-7: Respondents' Ownership of Business Location

Own or Lease	Frequency	Percent
Own	201	67%
Lease	90	30%
Don't Know / Refused	10	3%
Total	301	100%

Table A-8: Location of Company Headquarters

Headquarters Locations	Frequency	Percent
Southern California	214	71%
Elsewhere in California	19	6%
Outside of California	68	23%
Total	301	100%

A.3. Participant In-depth Interviews

This section provides a description of objectives, sample design, and respondent characteristics for the 50 in-depth interviews completed with program participants.

Participant Interview Objectives

EMI focused participant in-depth interviews on customers who had participated in the NRA program only. That is, they had completed an audit, but according to SCE's program records, they had not participated in Express Efficiency or SPC. The objectives of these interviews were to learn more about the population of customers for which the audit had apparently not influenced participation in one of the other components of BIS. Specifically, the objectives of the participant interviews were to:

1. Determine why NRA participants may not go on to participate in Express Efficiency or SPC, and
2. Determine whether NRA-only customers are implementing any of the Audit recommendations.

Participant Interview Sample Design

After consulting with the SCE evaluation manager, it was determined that the participant interview sample would include only customers in the Small and Very Small demand use categories. Two factors affecting this sample design were 1) most previous evaluations of the BIS suite of programs had focused on medium and large customers, and 2) the 2006 – 2008 NRA program was expanded to include these Small and Very Small customers, which were qualified to participate in previous years. In attempt to interview customers with the "freshest" recall of their experience with the NRA program, the sample frame was further restricted to customers who had participated in 2008.

Table A-9 below shows our target completes by size category (based on proportional representation of the sample data, using observations remaining after completion of the participant survey).

Table A-9: NRA Participant Interview Sample Design

Demand Use Category	Sample Frame Data		Interview Targets	
	Observations	%	Interviews	%
Very Small (0 – 19 kW)	520	60%	30	60%
Small (20 – 99 kW)	351	40%	20	40%
Total	871	100%	50	100%

Participant Interview Respondent Characteristics

EMI completed interviews with 30 very small NRA-only participants and 20 small NRA-only participants. The number of full-time employees ranged from 0 to 80, with a mean of 13.0 and a median of 3.5. Table A-10 shows respondents were equally divided between those who own the facilities housing their businesses and those whose business facilities are leased (38% each).

Table A-10: Ownership of Respondents' Businesses

Response	Frequency	Percent
Own	19	38%
Lease	19	38%
Refused	1	2%
Missing	11	22%
Total	50	100%

Table A-11 shows the primary business activity of participant interview respondents. Over 20% of respondents were involved in industrial process, manufacturing, or assembly. An additional 10% were involved in retail, and remaining respondents were involved in a wide variety of business activities.

Table A-11: Primary Business Activity of Interview Participants

Primary Business Activity	Frequency	Percent
Industrial Process/Manufacturing/Assembly	11	22%
Retail	5	10%
Community Service/Church/Temple	4	8%
Condo Association/Apartment Manager/Property Management	3	6%
Office	3	6%
Restaurant	3	6%
Grocery Store	2	4%
Health Care	2	4%
Residential Heating & A/C	2	4%
School	2	4%
Warehouse/Distribution	2	4%
Missing	2	4%
Auto Service & Repair	1	2%
Bank	1	2%
Bookkeeping & Tech Services	1	2%
Construction/General Contractor	1	2%
Hair Color Salon	1	2%
Laundry	1	2%
Liquor Store	1	2%
Party Rentals	1	2%
Wedding Planner	1	2%
Total	50	100%

A.4. Near Participant In-depth Interviews

This section describes the objectives, sample design, and respondent characteristics for the 30 near-participant in-depth interviews.

Near Participant Interview Objectives

In the context of this study, near-participants were defined as customers that submitted applications but never completed the project or received an incentive payment. The objectives of the near-participant in-depth interviews were to examine the causes of discontinuation and to identify steps SCE might take to foster increased levels of application completions. These interviews were used to gather information on discontinued and resubmitted projects, completed and planned installation activity, and to identify factors that could have contributed to successful completion of eligible projects.

Because EMI was not provided with contact information for SPC near-participants, EMI conducted interviews with Express Efficiency near-participants only.

Near-Participant Sample Design

SCE provided EMI with a database of Express Efficiency near-participants (i.e., customers with discontinued applications). As shown in Table A-12, this file contained 6,837 observations, with each observation representing a unique measure. EMI matched these observations with program tracking data of participants of Express Efficiency to determine how many of these near-participants went on to participate at a later date. The purpose of this was to remove program participants from the near-participant database. After deleting observations with invalid/missing customer phone numbers and missing gross kWh values, 4,307 observations remained.

Table A-12: Summary of Development of Express Efficiency Near-Participant Interview Sample Frame

	Observations in Sample Frame
Total Discontinued or Expired Applications	6,837
Observations removed because customer later participated in Express (w/ different application)	1,432
Observations Removed for Invalid/Missing Phone Number	27
Observations Deleted due to Phone Number for Vendor (not Customer)	1,070
Observations Deleted due to missing Projected kWh	1
Observations (Unique Customer Sites) in Sample Frame	4,307

Figure A-1 illustrates the projected kWh savings associated with the Express Efficiency near-participant applications. Each observation is plotted in descending order of savings, with kWh savings plotted on the y-axis, and cumulative savings plotted on the x-axis. This figure reveals that a small number of observations are responsible for a large percentage of the projected savings for Express Efficiency near-participants.

Figure A-1: Gross kWh Savings of Express Efficiency Discontinued Applications (Near Participants)

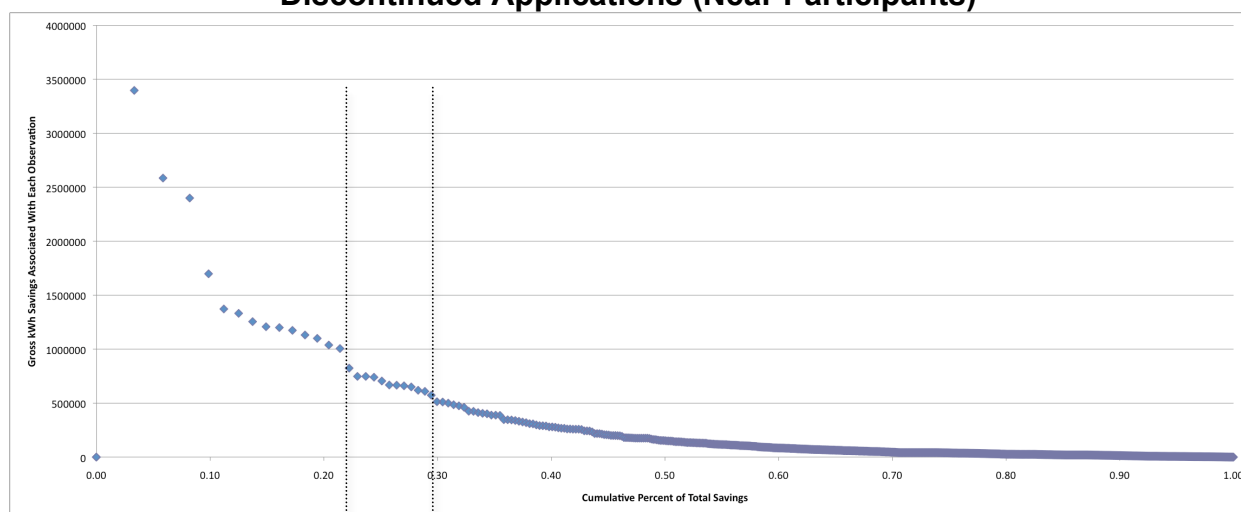


Table A-13 provides details the values associated with the natural cut-off points shown in the figure, as well as savings associated with each quartile. Here, we can see that less than 1% of observations are responsible for almost 30% of the total projected kWh savings. Less than 3% of observations are associated with half of projected savings for near participants, and roughly 11% of observations are associated with three-quarters of projected savings.

A relatively small number of observations in the near-participant database constitute a considerable amount of projected kWh savings. Because these few customers discontinued their participation in the program, the program effectively lost a substantial amount of kWh savings. Thus, it was important to concentrate the in-depth interviews on determining why these few customers' applications were discontinued.

Table A-13: Number of Observations Responsible for Projected Gross kWh Savings for Express Efficiency Discontinued Applications (Near-Participants)

Cumulative % of Total Projected kWh Savings	Minimum Gross kWh Savings ^(a)	Cumulative Number of Observations	Cumulative % of Observations
21%	1,005,925	14	0.33%
25% (1 st Quartile)	705,040	19	0.44%
29%	573,321	26	0.60%
50% (2 nd Quartile)	149,149	108	2.51%
75% (3 rd Quartile)	37,800	492	11.42%
100% (4 th Quartile)	0.3	4,307	100.00%

The Cumulative % of Total kWh Savings and Minimum Gross kWh Savings represent the minimum value of projected savings for a given percentage of the total savings for Express Efficiency near-participant applications. For example, 50% of projected kWh savings are attributed to 108 observations, which is just 2.5% of all observations in the Express Efficiency near-participant database. These 108 observations had a minimum savings of 149 MWh. The maximum kWh savings is 3,397,200 kWh and the sum of all kWh savings for all Express Efficiency near-participant observations is 102,253,988 kWh.

Near-Participant Interview Sample Design

Table A-14 shows the sampling plan for near-participant interviews. EMI conducted interviews with three sample strata. The first stratum consisted of the 14 observations responsible for 21% of projected kWh savings. All customers associated with these observations were contacted for interviews. The second stratum consisted of the 12 observations responsible for the next 8% of projected kWh savings, and half of the customers associated with these observations were targeted for interviews. Remaining interviews were conducted with customers associated with the remaining 4,281 observations; however, interviews with the third stratum were limited to applications submitted in 2008 in order to increase the completeness and validity of responses (due to better memory of respondents for applications submitted one year ago as compared to two or three years ago). With this sample stratification, in-depth interviews were focused on the relatively small number of customers who were responsible for a disproportionate amount of would-be savings. At the same time, EMI was able to collect data from the larger number of customers who submitted applications for measures with smaller projected savings figures.

Table A-14: Near Participant In-depth Interview Sample Design

Stratum	Projected Savings	# of Observations	# of Unique Customer Sites	# of Unique Customers	Target Completes
1	kWh \geq 1,005,925	14	13	13	13
2	573,321 \leq kWh $<$ 1,005,925	12	9	9	5
3 ^(a)	kWh $<$ 573,321	2,271	1,708	405	12
Total		2,297	1,730	427	30

a. Stratum 3 consists only of applications submitted in 2008 and does not include 690 observations for 2006 and 1,320 observations for 2007.

As shown in Table A-14, 13 unique customers submitted applications for measures that would have resulted in 1,005,925 kWh or greater savings. EMI targeted these 13 customers, aiming to complete interviews with all 13 customers. There were 9 customers in Stratum 2, who submitted applications for measures that would have resulted in at least 573,321 kWh savings, and EMI strove to complete 5 interviews (~ 50%) with these customers.

The breakdown of completed interviews by strata is shown in Table A-15.

Table A-15: Completed Near-Participant Interviews, by Stratum

Stratum	Complete Interviews	Percent
1	4	13%
2	3	10%
3	23	77%
Total	30	100%

Near Participant Respondent Characteristics

The respondents represented an array of business types, with the most common being retail, warehouse, or distribution centers, and “other.” Smaller businesses with 20 employees or less were represented in similar proportion to firms with 100 employees or more. Two thirds of the respondents owned their facilities.

As shown in Table A-17, project values ranged from \$800 to \$250,000. Half had projects valued at \$10,000 or less; only two projects were for \$100,000 or more. The majority of projects involved installations of lamps and/or lighting fixtures. Not one of the companies that are resubmitting their application has fewer than 18 employees; all of these smaller firms have now fallen out of the program.

Table A-16: Profile of Near Participant Interview Respondents

Characteristics	Discontinued Applications (n=25)	Resubmitted Applications (n=5)	Total (n=30)
Project Value			
Range	\$800 - \$250,000	\$4000 - \$19,000	\$800 - \$250,000
Mean	\$33,889	\$10,067	\$25,156
Project Type	Lighting AC Networking software Other	Lighting AC Other	
Facility Ownership	75%	75%	75%
Predominant Business Types	Retail, office, distribution/warehousing	Retail, distribution center, race track, auto manufacturer	Retail, grocery, warehouse, office, 'other'
Business Size (# of employees)			
Range	1 – 3000	18 – 450	1 – 3000
Mean	196	169	190
Under 20 emp.	50%	20%	33%
Under 100 emp.	80%	60%	63%
Over 100 emp.	20%	40%	37%

Source: Near-participant Interviews

A.5. Vendor In-depth Interviews

This section provides a description of objectives, sample design, and respondent characteristics for the vendor interviews.

Vendor Interview Objectives

In-depth interviews were conducted with 30 BIS trade allies, or vendors who had sponsored applications for customers who had participated in the BIS incentive programs.¹ The objectives of the interviews were to gauge vendors' satisfaction with the SPC and Express Efficiency programs and to determine the extent to which they are helping SCE to market and implement the programs.

This section describes how vendor data were obtained; the sample design, and finally the interview respondent characteristics.

¹ The 2009 BIS Application form provides the following definition of sponsorship: "Typically the project sponsor is a vendor who assists the customer in the purchase and installation of qualifying energy efficient equipment. The Vendor category includes vendors, installers, contractors, and energy service companies. Project Sponsors serve as the primary point of contact and all communications will be directed to them."

Trade Ally Interview Sample Design

EMI was able to glean information regarding program vendors (i.e., vendors, installers, contractors, and energy service companies) from the BIS program tracking data provided by SCE. One database contained information regarding participants of the SPC program, and a second database contained participants of the Express Efficiency program. Contained within both files were the associated vendors who sponsored applications for these participants. Vendor information was *only* available for projects for which the vendor sponsored the application; when the customer was indicated as the application sponsor, vendor information was not available.

Express Efficiency

Table A-17 shows the data cleaning undertaken to develop the sample frame for Express Efficiency vendors. After EMI removed observations with problematic contact information and erroneous customer numbers, the Express Efficiency program database provided by SCE included 11,454 observations, where one observation represented a single, unique measure. After deleting observations with missing vendor information, there were 2,794 remaining observations (an indication that most Express Efficiency customers did not have contractors sponsor their projects). For contractors that were missing end use information, EMI attempted to determine end use from related variables in the database (“Measure description” and “E3 measure”). Using this method, EMI was able to determine the end use for all but 204 of the 1,505 observations that were initially missing this information. Of the 2,590 remaining observations, there were 149 unique vendors with end use information.

Table A-17: Express Efficiency Vendor Data Summary

Express Efficiency Vendor Summary	Obs
Observations in Raw Database (one observation = one measure)	11,467
Observations Removed Due to Missing or Erroneous Customer Information	13
Observations Deleted Due to Missing Vendor Name	15
Observations Deleted Due to Missing Vendor Contact Info (i.e., missing phone number because vendor is not the project contact)	8,645
Observations Remaining with End Use Info	2,590
Unique Vendors in Interview Sample Frame	149

Figure A-2 plots each of the vendors by the number of applications they have sponsored, in descending order. The first 14 vendors depicted in the illustration stand out from the remaining vendors and appear to be qualitatively different from the remaining vendors in that they have been very active in the program, sponsoring 60 or more applications.

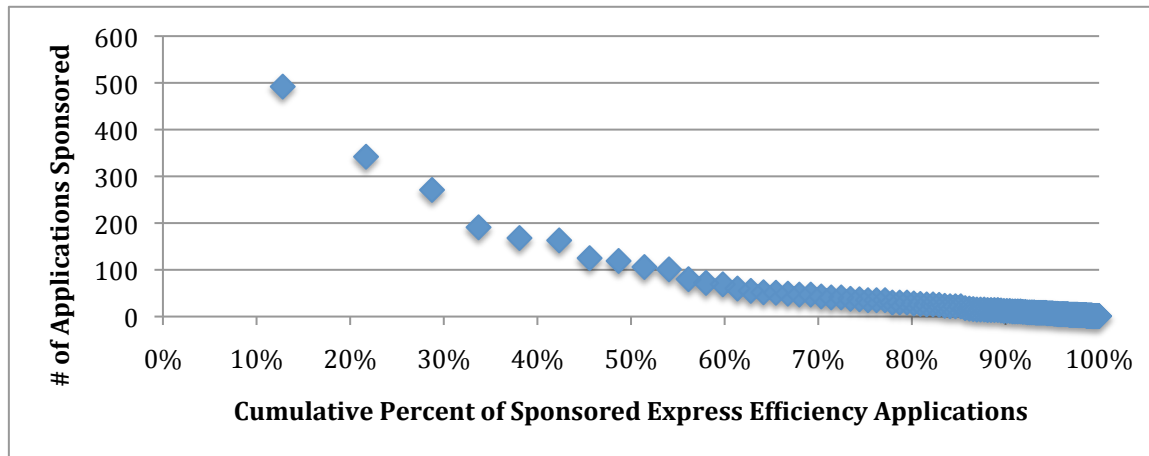
Figure A-2: Cumulative Percentage of Applications by Sponsors of Express Efficiency Applications

Table A-18 summarizes the Express Efficiency vendor data by end use and activity level. Vendors were considered to be “Active” if they worked with 60 or more customer sites, and “Less Active” if they worked with fewer than 60 customer sites. Most vendors who sponsored Express Efficiency applications specialized in lighting projects, and the majority of vendors worked with fewer than 60 customer sites.

Table A-18: Summary of Express Efficiency Vendor Data, by End Use and Program Activity

Program Activity ^(a)	End Use				Total Vendors
	HVAC	Lighting	Refrigeration	Motor	
“Active” Vendors	1	7	6	-	14
“Less Active” Vendors	17	105	12	1	135
Total Vendors	18	112	18	1	149

a. “Active” vendors sponsored applications for 60 or more customer sites. “Less Active” vendors sponsored applications for fewer than 60 customer sites.

Standard Performance Contracting (SPC) Vendors

Table A-19 shows the initial data cleaning undertaken to determine the sample frame for SPC vendors. After EMI removed observations with problematic contact information and erroneous customer numbers, the cleaned SPC database included 3,986 observations, or measures. After deleting observations with missing vendor information, there were 2,300 remaining observations. There were 146 unique vendors associated with these observations, and end use information was available for all vendors.

Table A-19: SPC Vendor Sample Frame Development

SPC Vendor Sample Frame Development	Count
Observations in Raw Database (one observation = one measure)	4,061
Observations Removed Due to Missing or Erroneous Customer Information	75
Observations Removed Due to Missing Vendor Contact Info (i.e., missing phone number because vendor is not the project contact)	1,686
Total Remaining Observations with Vendor Information	2,300
Total Unique Vendors in Final Frame	146

Figure A-3 plots each of the vendors by the number of applications they have sponsored, in descending order. The first 17 vendors depicted in the illustration stand out and appear to be qualitatively different from the remaining vendors in that they have been relatively active in the program, sponsoring 10 or more applications.

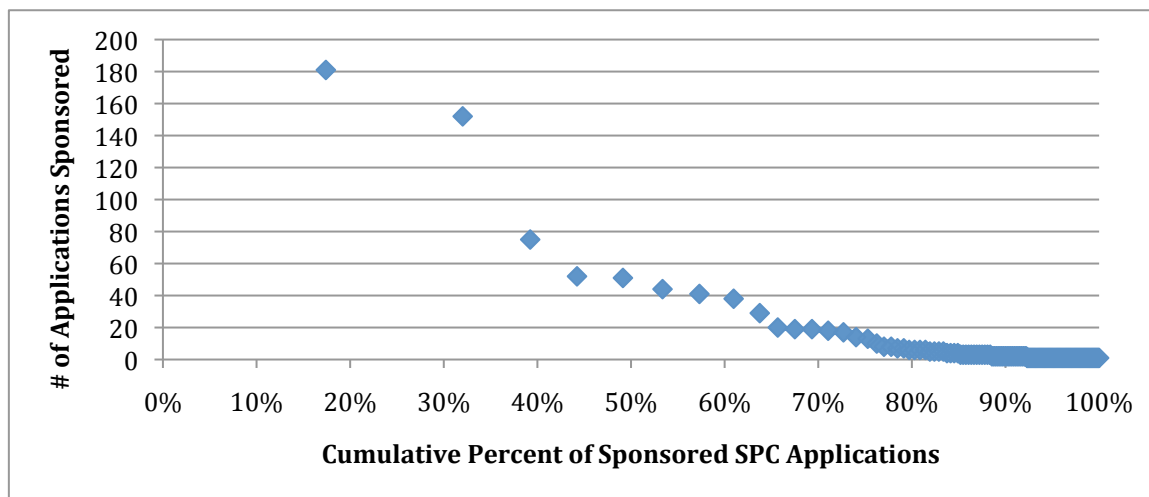
Figure A-3: Cumulative Percentage of Applications by Sponsors of Standard Performance Contracting (SPC) Applications

Table A-20 summarizes the SPC vendor data by end use and activity level. Most vendors who sponsored applications for SPC worked primarily with lighting or space cooling projects. The vast majority of SPC vendors worked with fewer than 10 customer sites.

Table A-20: Summary of SPC Program Data, by End Use and Program Activity

Program Activity ^(a)	End Use						Total Vendors
	Space Cooling	Lighting	Refrig.	Process	Mult. End Uses	Other ^(b)	
“Active” Contractors	7	9	-	1	-	-	17
“Less Active” Contractors	37	57	2	23	2	8	129
Total Vendors	44	66	2	24	2	8	146

a. “Active” vendors sponsored applications for 10 or more customer sites. “Less Active” vendors sponsored applications for fewer than 10 customer sites.

b. One measure description was “Demand Control Ventilation,” and the remainder were simply listed as “Equipment.”

The objectives of the vendor in-depth interviews were to characterize vendors’ experiences in working with the SPC and Express Efficiency programs and to determine the extent to which trade allies are helping SCE to market and implement the programs. The sampling objectives for this research effort were to select a variety of vendors that would enable the evaluation team to characterize the activities and experiences of vendors working with both incentive programs - Express Efficiency and Standard Performance Contracting (SPC). Within each of these program components, EMI stratified sample targets by activity level, as it was equally important to learn why active vendors are so motivated to sponsor applications and why less active vendors are not participating in these programs more frequently.

The sample design is summarized in Table A-21. As per the evaluation plan, EMI budgeted to complete in-depth interviews with 30 program vendors. As shown, the suggested sample targets were divided equally among Express Efficiency and SPC vendors, and were also divided approximately equally among active vendors (sponsoring 10 or more applications for SPC and 60 or more for Express) and less active vendors (sponsoring fewer than 10 applications for SPC and fewer than 60 for Express).

Because of the small sample size, EMI did not recommend making explicit goals regarding the number of completed interviews by end use. However, to ensure that a variety of vendors are interviewed, EMI strove to conduct approximately half of interviews with lighting vendors and half with non-lighting vendors.

For SPC and Express “Active” vendors, the set goal of 7 completed interviews was ambitious, as there were only 17 SPC vendors and 14 Express Efficiency vendors with contact information for this category. In the event that EMI was unable to complete 7 interviews each with Active vendors for SPC and/or Express, it was determined that the remaining interviews would be allocated to other sample cells.

Table A-21: Vendor In-depth Interview Sample Design

Program/Activity	Obs in Sample Frame	Sample Target
Express Efficiency	149	15
“Active” Vendors	60	7
“Less Active” Vendors	89	8
SPC	146	15
“Active” Vendors	17	7
“Less Active” Vendors	129	8
Total	295	30
“Active” Vendors	77	14
“Less Active” Vendors	218	16

Due to the small sample size, EMI did not set specific sample targets by end use category. However, EMI strove to complete approximately one-half of the interviews with lighting vendors and one-half with non-lighting vendors.

Vendor Respondent Characteristics

This section describes characteristics of the vendors we interviewed for this evaluation. We first provide information regarding the number of respondents we spoke with by program, activity level, and end use. We then provide information on the number of applications sponsored, how long vendors have worked with the programs, and the number of employees to provide a feel for the size of vendors’ businesses. Finally, we describe the types of end uses the respondents normally provide or service, and the types of end uses they normally provide or service when they are sponsoring SPC or Express Efficiency applications.

Table A-22 shows the number of completed interviews by program, activity level, and end use. We became very close to meeting our precise goals, completing 14 interviews with Express Efficiency vendors and 16 with SPC vendors.

Table A-22: Completed Vendor Interviews by Activity Level and End Use

Program & End Use		Activity Level ^(a)		Total (n = 30)
		Less Active (n = 16)	Active (n = 14)	
Express Efficiency	Lighting	4	3	7
	Other	4	3	7
	Total	8	6	14
SPC	Lighting	4	4	8
	Other	4	4	8
	Total	8	8	16

a. Active Express Efficiency vendors worked with 60 or more applications, and Active SPC vendors worked with 10 or more applications.

Table A-23 describes the number of applications vendors sponsored, the number of years they have worked with the programs, and the number of employees at their business. Express Efficiency trade allies had generally sponsored more applications, but had fewer employees than SPC vendors. Both Express Efficiency and SPC vendors had worked with the program for a median of 5 years.

Table A-23: Number of Applications Sponsored, Years with the Program, and Number of Employees

Program		# of Applications Sponsored	# of Yrs Worked With the Program	# of Employees
SPC	Minimum	1	1	2
	Maximum	181	17	80,000
	Mean	32.88	6.65	6,252.31
	Median	13.50	5.00	85.00
	Std. Deviation	54.26	5.91	19,898.92
Express	Minimum	2	1	2
	Maximum	5,000	10	450
	Mean	400.50	5.05	77.21
	Median	43.00	5.00	17.50
	Std. Deviation	1,324.71	2.553.00	132.17

Table A-24 shows the types of products and services vendors reported that they normally provide to their customers. Half of both SPC and Express Efficiency vendors normally provide lighting products and/or services. Only Express Efficiency trade allies reported providing refrigeration or window tinting services, and only SPC trade allies reported providing full turnkey services or “other” services such as industrial process solutions.

Table A-24: Types of Products/Services Generally Provided for Customers/Clients

Product/Service ^(a)	Program			
	Express (n = 14)		SPC (n = 16)	
	freq	Percent	freq	Percent
Lighting	7	50%	8	50%
HVAC	1	7%	2	13%
Refrigeration	4	29%	-	0%
Window Tinting	2	14%	-	0%
Full Turnkey Energy Solutions	-	0%	3	19%
Other ^(b)	-	0%	8	50%

a. Multiple responses were accepted, thus categories are not mutually exclusive.

b. Products/services included in the “Other” category include electrical, renewables, and process applications such as injection molding and compressed air systems.

Table A-25 shows the type of measure respondents reported they most often provide or service for their customers when they are sponsoring customer applications for SPC or Express Efficiency. Again, the most common end use was lighting, for both SPC and Express Efficiency trade allies. About one-third of SPC vendors said they work with multiple types of measures, and one-quarter said they work with “other” or process end uses when they are sponsoring applications. More than one-third of Express Efficiency vendors said they work with refrigeration projects when they are sponsoring applications.

Table A-25: Most Common Type of Measure for Sponsored Applications

Program & End Use		Frequency	Percent
Express	Lighting	6	43%
	Refrigeration	5	36%
	Window Tinting	2	14%
	Motion Sensors	1	7%
	Total	14	100%
SPC	Lighting	6	38%
	Refrigeration	1	6%
	Multiple ^(a)	5	31%
	Other ^(a)	4	25%
	Total	16	100%

a. Respondents reported that they work with “everything,” or usually sponsor applications with more than one type of measure, such as providing HVAC, lighting, and controls.

b. Includes inverter drives, compressed air & vacuum systems, hydraulic fluid power, and process applications for oil refineries.

A.6. Market Actor In-Depth Interviews

This section describes the objectives, sample design, and respondent characteristics for the 30 market-actor in-depth interviews.

Market Actor Interview Objectives

Market actor interviews were undertaken to gauge the extent of program awareness and opportunities for outreach activities among various organizations and businesses, both on the customer end and with upstream market actors. The goal was to complete a total of 35 market actor interviews, including 15 community-based organizations (CBOs) and trade organizations and 20 supply-chain market actors.

The goals of the CBO and trade organization interviews were to determine the extent of awareness of BIS among local organizations such as economic development associations, ethnic business associations, chambers of commerce, and trade associations, and to determine the potential for partnering with such organizations to increase program outreach efforts at the local level.

Goals of the supply-chain market actor interviews were to obtain perspectives on program design and operation from various perspectives. These interviews sought to determine whether the BIS program has an influence on the manufacturing or stocking practices of equipment manufacturers/distributors, and determine opportunities for disseminating information regarding energy efficiency program offerings through manufacturers and distributors.

Market Actor Interview Sample Design

EMI developed the sample of agencies and organizations by using an Internet search to identify organizations that serve small businesses in Southern California. This included economic development

organizations, chambers of commerce, ethnic business organizations, and trade associations serving small businesses in SCE's service territory (e.g., restaurants, grocers, auto body workers, etc). EMI also requested contact information from SCE for organizations that SCE is currently partnering with or planning to partner with in the near future. These contacts included ethnic trade associations, ethnic chambers of commerce, and faith-based organizations.

The sample of manufacturers and distributors was developed from referral obtained during the vendor interviews. EMI supplemented this list with an Internet search to locate additional manufacturers, distributors, and energy service companies that serve the Southern California market.

Market Actor Respondent Characteristics

The evaluation team completed interviews with a total of 30 market actors, including 14 agencies and organizations and 16 supply-chain market actors. Respondent characteristics are summarized in Table A-26. As shown, respondents included agencies and organizations serving ethnic businesses, small businesses, and businesses in general, as well as vendors and real estate/property managers serving these businesses. On the supply side, market actors included manufacturers and distributors that serve the Southern California market.

Table A-26: Market Actor Respondents

Community-Based Markets Actors	Frequency	Percent
Ethnic Business Organizations	5	36%
Small Business Organizations	3	21%
Contractor/Vendor Associations	2	14%
Real Estate/Property Management Associations ^(a)	2	14%
General Business Organizations	2	14%
Total	14	100%

a. One of the organizations targeting real estate/property managers works with a specific ethnic business community (Chinese American Real Estate Professionals Association). Thus, the number of organizations with "real estate/property management associations" is actually three as opposed to two shown in the table so as not to count twice.

Supply-Chain Market Actor Types	Frequency	Percent
Manufacturers	9	56%
Distributors	4	25%
Manufacturer & Distributer	2	13%
Mfr/Distr/OEM/Contractor/ESCO	1	6%
Total	16	100%

Profile of Community-Based Organizations

The CBOs interviewed for this study vary a bit in terms of the number of members or clients they have within the state. The largest organization interviewed in terms of California membership is the California Restaurant Association (CRA), which has over 22,000 members according to one source. Some of the organizations are nationwide as well or have a partner nationwide organization (e.g., CRA and its partner the National Restaurant Association). In contrast, the Owens Valley Contractors and Vendors

Association consists of only 40 members at this point, though the organization was just established early this year. Overall, in terms of their membership base, the organizations interviewed are influential to SCE's small commercial customers and the trade allies who work with them.

Profile of Supply-Chain Market Actors

As shown in Table A-27, the majority of supply-chain market actors interviewed for this study specialized in lighting (38%) or refrigeration (38%). Company size ranged from 2 to 56,000 employees, with a median of 200 employees, and a median annual revenue of \$38.75 million.

Table A-27: Profile of Supply-Chain Market Actors

Equipment End Use	Manufacturers	Distributors	Other^(a)	Total	Percent
Lighting	1	2	3	6	38%
Refrigeration	4	2	0	6	38%
Compressed Air	3	0	0	3	19%
HVAC	1	0	0	1	6%
Total	9	4	3	16	100%
Percent	56%	25%	19%	100%	

a. "Other" includes two respondents who described their business as both a manufacturer and distributor, and one respondent whose company covers all aspects of the supply chain (manufacturing, OEM, distributing, ESCO, and contracting services).

B. DATA COLLECTION INSTRUMENTS

Participant Phone Survey

Participant Interview Guide

Near Participant Interview Guide

Trade Ally Interview Guide

Supply-Side Market Actor Interview Guide

Agency Interview Guide

BIS PROCESS EVALUATION: PARTICIPANT SURVEY – CATI

Introduction & Identify Appropriate Respondent

[IF PROGRAM CONTACT IN SAMPLE, USE THE FOLLOWING WORDING:]

Q1a

Hello, this is <INTERVIEWER NAME> calling from Data Development Worldwide on behalf of Southern California Edison. This is not a sales call. May I please speak with <CONTACT> ?

[IF NEEDED]: my understanding is that <CONTACT> is responsible for making energy-related decisions for your firm at <SERVICE ADDRESS> – may I please speak with him/her?

1 No, this person no longer works here – SKIP to Q1c

2 No, this person is not available right now [Ask when available or leave message.] CALL BACK LATER

3 Yes – SKIP to Q2

97 No, other reason (THANK & TERMINATE)

[IF NO PROGRAM CONTACT IN SAMPLE – USE THE FOLLOWING WORDING:]

Q1b

Hello, this is <INTERVIEWER NAME> calling from Data Development Worldwide on behalf of Southern California Edison. This is not a sales call. May I please speak with the person most knowledgeable about your participation in the Southern California Edison <PROGRAM> program for your firm at <SERVICE ADDRESS>?

[IF NEEDED] We're calling to do a follow-up survey about your firm's participation in one or more of SCE's energy efficiency programs. The purpose of the survey is to assess how well the program met the needs of your company and to make improvements to better meet those needs in the future.

[IF NEEDED] This is a very important fact-finding survey among firms that have recently participated in an energy efficiency program sponsored by SCE. We are NOT interested in selling anything, and responses will not be connected with your firm in any way. SCE wants to understand how businesses think about and manage their energy consumption.

[IF NEEDED] This is an important study to better understand how businesses like yours think about and manage their energy consumption. Your input is very important to SCE to better serve you in the future.

1 Address correct/Continue Q1b until you find appropriate contact person – THEN GO TO Q2

97 There is no one here with information on that address/wrong address THANK & TERMINATE

Q1c

[IF <CONTACT> WILL NOT EVER BE AVAILABLE]

May I please speak with the person most knowledgeable about recent changes of cooling, lighting, or other energy-related equipment for your firm at <SERVICE ADDRESS>.

[IF NEEDED] We're calling to do a follow-up survey about your firm's participation in one or more of SCE's energy efficiency programs. The purpose of the survey is to assess how well the program met the needs of your company and to make improvements to better meet those needs in the future.

[IF NEEDED] This is a very important fact-finding survey among firms that have recently participated in

an energy efficiency program sponsored by SCE. We are NOT interested in selling anything, and responses will not be connected with your firm in any way. SCE wants to understand how businesses think about and manage their energy consumption.

[IF NEEDED] This is an important study to better understand how businesses like yours think about and manage their energy consumption. Your input is very important to SCE to better serve you in the future.

1 Address correct/Continue Q1c until you find appropriate contact person – THEN GO TO Q2

97 There is no one here with information on that address/wrong address THANK & TERMINATE

Q2

[IF <CONTACT> OR PERSON RESPONSIBLE FOR ENERGY-RELATED DECISIONS IS AVAILABLE]

Hello, my name is <INTERVIEWER NAME> calling from Data Development Worldwide on behalf of Southern California Edison. We're calling to do a follow-up survey about your firm's participation in the <PROGRAM> program at <SERVICE_ADDRESS>. Do you recall participating in <PROGRAM> on or about <PROGRAM DATE>?

[Note: For Express Efficiency, PROGRAM DATE refers to the date that the equipment was installed. For SPC, PROGRAM DATE refers to the date the incentive application was processed. For NRA, PROGRAM DATE refers to the date the audit was conducted.]

If <PROGRAM> = EXPRESS [IF NEEDED: This program offers rebates on the purchase and installation of qualifying equipment that improves the energy efficiency of your business. To qualify, the equipment must be on SCE's itemized measures list. Do you remember participating in this program?]

If <PROGRAM> = NRA [IF NEEDED: The energy audit involved an auditor coming to your facility and examining your equipment and asking questions about your energy use and your equipment. The auditor would have left energy saving information at the time of the audit and/or mailed you a written report with energy saving recommendations. Do you remember this on-site audit?]

If <PROGRAM> = SPC [IF NEEDED: This program offers customized financial incentives for the installation of high efficiency equipment or systems, including both common and more specialized equipment. Incentives are calculated based on the type of measure and the energy savings over a 12-month period. Do you remember participating in this program?]

[IF NEEDED] This is a very important fact-finding survey among firms that have recently participated in an energy efficiency program sponsored by SCE. We are NOT interested in selling anything, and responses will not be connected with your firm in any way. SCE wants to understand how businesses think about and manage their energy consumption.

[IF NEEDED] This is an important study to better understand how businesses like yours think about and manage their energy consumption. Your input is very important to SCE to better serve you in the future.

1 Yes, we participated in the program, and address is correct - ASK Q3

2 No, I do not recall participating in the program - SKIP to Q4

3 There is no one here with information on that address/wrong address – THANK & TERMINATE

9898 Refused - SKIP to Q5

99 Don't know - SKIP to Q4

Q3.

Are you the person responsible for your company's decision to participate in the program, or were you the main point of contact with SCE?

1 Yes - SKIP to G1

2 No - GO TO Q4

98 Refused - GO TO Q4

99 Don't know - GO TO Q4

Q4.

[IF SITE HAS PARTICIPATED IN MORE THAN ONE PROGRAM; ELSE SKIP TO Q5]

[If the contact doesn't know about the program that is specified, and their site has participated in another program, see if they can answer about that one. Ask questions for the one they are familiar with, and document which program questions were asked about.]

My records also show that your firm participated in the <PROGRAM> program on <PROGRAM_DATE>. Do you recall participating in this program?

If <PROGRAM> = EXPRESS [IF NEEDED: This program offers rebates on the purchase and installation of qualifying equipment that improves the energy efficiency of your business. To qualify, the equipment must be on SCE's itemized measures list. Do you remember participating in this program?]

If <PROGRAM> = NRA [IF NEEDED: The energy audit involved an auditor coming to your facility and examining your equipment and asking questions about your energy use and your equipment. The auditor would have left energy saving information at the time of the audit and/or mailed you a written report with energy saving recommendations. Do you remember this on-site audit?]

If <PROGRAM> = SPC [IF NEEDED: This program offers customized financial incentives for the installation of high efficiency equipment or systems, including both common and more specialized equipment. Incentives are calculated based on the type of measure and the energy savings over a 12-month period. Do you remember participating in this program?]

1 Yes - SKIP to G1

2 No - GO TO Q5

98 Refused - GO TO Q5

99 Don't know - GO TO Q5

Q5

It sounds like someone else at your location may be more familiar with your firm's participation in SCE's <PROGRAM> program? IF YES: Can you tell me who that person might be?

1 Yes, it was probably [NEW CONTACT NAME] – ASK TO SPEAK WITH THEM AND GO BACK to Q2

2 Yes, but I'm not sure who it was – GO BACK to Q1c

3 No, I am the person to talk to - GO TO G1

97 No – THANK & TERMINATE

98 Refused – THANK & TERMINATE

99 Don't know – THANK & TERMINATE

General Awareness and Attitudes

Most of questions I have for you today relate to your company's participation in SCE's <PROGRAM> program in <YEAR>. But I'm going to start by asking you some general questions about energy efficiency.

G1.

Does your company currently ... [READ AND RECORD ANSWER FOR EACH]

- a)** Have purchasing guidelines that specifically recommend or require high efficiency equipment (lighting, HVAC, windows, water heat, etc.)?
- b)** Employ an energy manager?

- c) Have a formally adopted energy management plan?
- d) Provide training to facility staff on operations and maintenance that reduce facility energy use?
- e) Provide guidelines or training to employees on energy conservation practices?
- f) Track or benchmark monthly energy use through the use of an energy management system, an online system, or some other computer program?

- 1 Yes
- 2 No
- 98 Refused
- 99 Don't know

G2.

Energy efficient investments pay for themselves through reduced utility bills over time. Considering projects your company would approve, what is the longest period of time your company would allow for an energy efficient investment to pay for itself? Please give your answer in years.

- YR # of Years
- 98 Refused
- 99 Don't Know

G3

What sources do you and members of your company's mid-level or senior management use to learn about energy saving equipment alternatives and building upgrades? [RECORD ALL MENTIONS; DO NOT READ LIST]

- 1 Contractor / Design professional/ Equipment vendor
- 2 Friends/Family
- 3 Newspaper/TV
- 4 Trade journals, magazines, other periodicals
- 5 Trade industry conferences
- 6 Energy/energy efficiency organization website or publications
- 7 SCE web site or publication
- 8 Call SCE or SCE customer service personnel
- 9 Internet - unspecific (PROBE FOR SPECIFIC WEBSITE)
- 97 Other (SPECIFY) _____
- 98 Refused
- 99 Don't know

G4

How aware would you say you are of energy-efficient equipment and practices for this business, on a scale of 1 to 5, with 1 being "not at all aware" and 5 being "very aware"?

- #Rating from 1 to 5 - ASK G5
- 98 Refused - SKIP to G6
- 99 Don't know - SKIP to G6

G5

Compared to before you participated in SCE's program, would you say that your current awareness of energy-efficient equipment and practices is greater, less, or the same?

- 1 Greater than before
- 2 Less than before
- 3 The same
- 98 Refused
- 99 Don't know

[ASK EVERYONE]

G6

Over the past 3 years, and before the recent economic downturn, how would you characterize your company's business outlook? Would you say it was ...

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

Nonresidential Audit Experience Module

[If <PROGRAM = NRA> ELSE SKIP TO R1]

Great, now I'd like to ask some questions about your participation in SCE's Energy Audit.

A1

How did you first learn about SCE's Energy Audit program? [ACCEPT MULTIPLES; DO NOT READ LIST.] AFTER EACH RESPONSE, PROBE: How else?

- 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
- 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 at the Pacific Energy Center (PEC), Energy Resource Center (ERC) or Customer Technology Assessment Center (CTAC)
- 15 Seminar or Training Class sponsored by Utility
- 16 Seminar or Training Class NOT sponsored by Utility
- 17 SCE's website
- 18 SCE Representative/Auditor contacted respondent
- 97 Other (SPECIFY) _____
- 98 Refused
- 99 Don't know

A2

What were the primary reasons your company participated in the Energy Audit program? [DO NOT READ CATEGORIES; ACCEPT MULTIPLES]

- 1 To identify ways to save energy
- 3 To save money on electric bills
- 4 Because the program was sponsored by a utility
- 5 Helping protect the environment

- 6 Previous experience with other utility programs
- 7 Recommended by utility account reps
- 8 Recommended by contractors
- 9 Participation in previous years
- 10 It was free
- 11 Because of rebates/incentives
- 97 Other (SPECIFY) _____
- 98 Refused
- 99 Don't know

A3

On a scale of 1 to 5, with 1 being “not at all” and 5 being “very much,” to what extent did the information you received about the Energy Audit clearly explain the audit and audit process?

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

A4

Did you participate in the audit or interact with the audit contractor during the site visit?

- 1 Yes - ASK A5
- 2 No - SKIP to A7
- 98 Refused - SKIP to A7
- 99 Don't Know - SKIP to A7

A5

On a scale of 1 to 5, with a 1 meaning “very unsatisfied” and a 5 meaning “very satisfied” how satisfied you were with respect to:

- A5a.** The professionalism of the auditor
 - #Rating from 1 to 5
 - 98 Refused
 - 99 Don't know
- A5b.** The knowledge and expertise of the auditor
 - #Rating from 1 to 5
 - 98 Refused
 - 99 Don't know
- A5c.** The audit process, in general
 - #Rating from 1 to 5
 - 98 Refused
 - 99 Don't know

A6a

[Ask if any A5a, A5b, or A5c = 1 or 2. Else SKIP to A6b]

Can you elaborate on what was not very satisfactory to you?

- &Explain** Record response verbatim
- 98Refused
- 99Don't Know

A6b

[Ask if any A5a, A5b, or A5c = 4 or 5. Else SKIP to A7]

Can you elaborate on what you found to be so satisfactory?

& Explain Record response verbatim
98 Refused
99 Don't Know

A7

Did you receive a written report that summarized the audit and provided recommendations for energy efficiency improvements to your facility?

1 Yes, I personally received the report
2 No, I didn't receive the report, but someone else at my company did
3 No, to my knowledge no one at my company received a report
98 Refused
99 Don't Know

A8

Did an SCE representative follow up with you or someone else at your company to discuss the audit results and recommendations?

1 Yes, me
2 Yes, someone else at my company
3 No
98 Refused
99 Don't Know

A9

[IF A7 = 1 or A8 = 1; ELSE SKIP TO A10d.]

Do you recall any specific recommendations in the audit report?

1 Yes (Specify) _____
2 No
98 Refused
99 Don't Know

A10

On a scale of 1 to 5, with a 1 meaning "very unsatisfied" and a 5 meaning "very satisfied" indicate how satisfied you were with respect to the following:

A10a. The overall level of detail of the audit report
#Rating from 1 to 5
98 Refused
99 Don't know

A10b. The accuracy of the report in representing this facility and its energy use characteristics and existing equipment
#Rating from 1 to 5
98 Refused
99 Don't know

A10c. The timeliness of receiving the written audit report after the audit was conducted
#Rating from 1 to 5
98 Refused
99 Don't know

A10d. The reasonableness and appropriateness of recommendations for your business
#Rating from 1 to 5
98 Refused

99 Don't know

A10e. The level of support provided by SCE to identify next steps after the audit and how to implement the recommendations

#Rating from 1 to 5

98 Refused

99 Don't know

Because the goal of this research is to help SCE improve the services it provides its commercial customers, I'd like to get some additional insight into your experiences with SCE's energy audit program.

A11a

[If any A10a-A10e = 1 or 2. ELSE SKIP TO A11b.]

Can you elaborate on what was unsatisfactory to you? [PROMPT IF NECESSARY]

&Explain Record response verbatim

98 Refused

99 Don't Know

A11b

[If any A10a-A10e = 4 or 5. ELSE SKIP TO A12a.]

Can you provide some insight into what was satisfactory to you? [PROMPT IF NECESSARY]

&Explain Record response verbatim

98 Refused

99 Don't Know

A12a

Has your company implemented any of the audit recommendations?

1 Yes

2 No – SKIP To A14

98 Refused - SKIP TO A15a

99 Don't Know - SKIP TO A15a

A12b

[IF <PROGRAM> = NRA AND (<SPC_flag> = 1 AND/OR <EXPRESS_flag> = 1). ELSE SKIP TO A13.]

According to our records, you received rebates or incentives from SCE for the installation of energy efficient equipment. On a scale of 1 to 5, with 1 being "Not at all influential" and 5 being "Very influential," how much did the audit influence you to participate in the incentive program and install this equipment?

#Rating from 1 to 5

97 Don't recall participating in the incentive program

98 Refused

99 Don't Know

A13

Has your company purchased and installed any of the recommended equipment without seeking SCE incentives?

1 Yes (SPECIFY - Why did you not apply for incentives?)_____ - SKIP TO A15a

2 No - SKIP TO A15a

98 Refused - SKIP TO A15a

99 Don't Know - SKIP TO A15a

A14

[IF A12a = 2. ELSE SKIP TO A15a]

What are the primary barriers your company faces in implementing the audit recommendations? [ACCEPT MULTIPLES] (DO NOT READ LIST)

- 1 Lack of expertise to identify equipment
- 2 Company purchasing requirements
- 3 Can't get financing
- 4 Recommended equipment not available
- 5 My contractors are not familiar enough with equipment
- 6 We only replace equip at time of failure
- 7 Don't believe we'll see the savings
- 8 Other projects are higher priority
- 9 Building owner will not approve/difficulty to get owner approval
- 10 Bad economy/non-critical projects on hold
- 11 Company moving/closing facility
- 12 Other (specify) _____
- 13 None we have already implemented all recommendations
- 98 Refused
- 99 Don't Know

The intention of the Energy Audit is to inform customers of the benefits of energy efficient technologies, and recommend those that are most appropriate to their facility. Thinking about this goal... ..

A15a

How useful has/will the energy audit be to you when you consider future equipment purchases/retrofit projects? Would you say the audit is or will be... [READ RESPONSES]

- 3 Very useful
- 2 Somewhat useful
- 1 Not at all useful
- 98 Refused
- 99 Don't Know

A15b

Can you elaborate on why you gave that response?

- & Explain** Record response verbatim
- 98 Refused
- 99 Don't Know

A16

On a scale from 1 to 5 with a one meaning "not at all" and a 5 meaning "very much" how much did the Audit improve your knowledge of the energy efficient technologies that would benefit your business?

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

A17

Using the same scale, compared to before you participated in the Audit program, how much more confident are you about the energy savings you can expect to gain through energy efficient equipment?

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

[SKIP TO AP1]

Rebate/Incentive Program Module

If <PROGRAM> = SPC OR <PROGRAM> = Express; ELSE SKIP TO AP1

Great, now I'd like to ask some questions about your participation in SCE's <PROGRAM> program.

R1

How did you first learn about the financial incentives available through this program? [ACCEPT MULTIPLES]

- 1 Respondent approached contractor/ESCO/A&E firm/other 3rd party
- 2 Respondent approached utility concerning another matter and learned about the program
- 3 Informed by Utility Representative
- 4 Informed by contractor/ESCO/A&E firm/other 3rd party
- 5 Utility brochure in mail
- 6 Bill insert
- 7 Word-of-mouth from friends, family, co-workers
- 8 TV, radio, newspaper ad
- 9 Magazine or trade journal
- 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 at the Pacific Energy Center (PEC), Energy Resource Center (ERC) or Customer Technology Assessment Center (CTAC)
- 15 Seminar or Training Class sponsored by Utility
- 16 Seminar or Training Class NOT sponsored by Utility
- 17 SCE's website
- 18 Energy audit from SCE
- 97 Other (SPECIFY) _____
- 98 Refused
- 99 Don't know

R2

What were the primary reasons your company participated in the incentive program? [DO NOT READ CATEGORIES; ACCEPT MULTIPLES]

- 1 To identify ways to save energy
- 2 To save money on electric bills
- 3 Because the program was sponsored by a utility
- 4 Helping protect the environment
- 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

R3

Thinking back to when you first learned about this program and received or downloaded the information ... to what extent did the information clearly explain the program requirements and application process, on a scale of 1 to 5 with a 1 meaning "not at all" and a 5 meaning "very much"?

#Rating from 1 to 5

98 Refused

99 Don't know

R4

[IF <PROGRAM> = SPC, ELSE SKIP TO R5a]

Did you use any of the program tools and supporting materials, such as the software savings calculator or program manual?

R4a

Used software/savings calculator? [IF NEEDED: The software is available for download on SCE's website. This custom software application package includes a series of data input screens and allows applicants to systematically enter the necessary data and generate the desired submittal document(s) for program participation.]

1 Yes

2 No

98 Refused

99 Don't Know

R4b

Used program manual? [IF NEEDED: The program manual is contained in a series of PDF documents. The manual provides a detailed description of program qualifications and application procedures, and is available for download from SCE's website.]

1 Yes

2 No

98 Refused

99 Don't Know

R4c

[If R4a or R4b = 1, ELSE SKIP TO R5a]

Was/Were it/they helpful?

1 Yes, very helpful

2 Yes, somewhat

3 No, did not help me

98 Refused

99 Don't Know

R4d

Can you elaborate on your response?

& Explain Record response verbatim

98 Refused

99 Don't Know

[If <ENDUSE> = Lighting, Process, Refrigeration, Space Cooling, and/or HVAC]

Now I'd like to ask you about the <ENDUSE> project(s) you received incentives for.

[Note: "Process" projects include: Air compressor systems, VSDs, Economizers, Heat pumps, Injection molding machine replacements, Motors, Insulation, Pumping systems, Dryers, etc, ...]

If <ENDUSE> = Other, Multiple]

Now I'd like to ask you about the project you received incentives for. Our records show that you completed a project that may have involved installing system controls, restaurant equipment, motors, software, or other types of projects.

[If missing <ENDUSE>]

Now I'd like to ask you about the project you received incentives for.

R5a

Who was primarily responsible for preparing the incentive application? (company, title)

- 1 Self
- 2 Someone else in my company - SPECIFY Title: _____
- 3 Consultant/contractor - SPECIFY Company: _____
- 4 Other – SPECIFY: _____
- 98 Refused - SKIP TO R6
- 99 Don't know - SKIP TO R6

R5b

Did [you/they] experience any difficulties or unreasonable delays in preparing the incentive application?

- 1 Yes – SPECIFY _____
- 2 No
- 98 Refused
- 99 Don't know

R6

Did you receive assistance from a third party contractor or vendor to plan or implement the <PROGRAM> project?

- 1 Yes - ASK R7
- 2 No - SKIP TO R13
- 98 Refused - SKIP TO R13
- 99 Don't know - SKIP TO R13

R7

How did you choose this contractor/vendor?

(DO NOT READ LIST. ACCEPT MULTIPLE RESPONSES)

- 1 Referral from SCE website
- 2 Referral from SCE Account Representative
- 3 Referral from SCE energy auditor
- 4 Referral from other SCE representative
- 5 Referral from manufacturer
- 6 Referral from another contractor/vendor
- 7 Contractor/vendor approached customer
- 8 Word-of-mouth from friends, family, co-workers
- 9 TV, radio, newspaper ad
- 10 Used this contractor/vendor for previous projects
- 11 Other (SPECIFY) _____
- 98 Refused
- 99 Don't know

R8

And what role did the third party contractor/vendor play in your decision to implement the project? (How significant were they in your decision to do the project?) Did they ... [READ RESPONSES; ACCEPT MULTIPLES]

- 1 Prepare the project application
- 2 Provide advice on design or specification of equipment

3 Install the equipment
98 Refused
99 Don't know

R9

On a scale from "1" to "5" with 1 being "not at all influential" and "5" being "very influential," how influential was the [vendor/contractor] in specifying the high efficiency equipment so this project would qualify for incentives?

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

R10

On a scale of 1 to 5, with a 1 meaning "Poor" and a 5 meaning "Excellent," please rate the quality of work completed by the vendor/contractor on this project.

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

R11

Using the same scale, rate your overall experience working with the [vendor/contractor].

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

R12

Did you elect to assign your incentive payment to the third party vendor/contractor?

1 Yes - SKIP TO R14
2 No
98 Refused
99 Don't know

R13

After you submitted the application, did you experience any problems or unreasonable delays in obtaining your incentive payment?

1 Yes - Explain: _____
2 No
98 Refused
99 Don't know

R14

On a scale of 1 to 5, with a 1 meaning "very unsatisfied" and a 5 meaning "very satisfied" indicate how satisfied you were with:

R14a. The ease of selecting equipment for this project.
#Rating from 1 to 5
98 Refused
99 Don't know

R14b. The performance of the equipment you purchased
#Rating from 1 to 5
98 Refused
99 Don't know

R14c. The utility bill savings resulting from the equipment you installed
#Rating from 1 to 5

98 Refused
99 Don't know

R14d. The rebate amount relative to total project cost
#Rating from 1 to 5
98 Refused
99 Don't know

R14e. The time it took to receive your rebate after submitting the application
#Rating from 1 to 5
98 Refused
99 Don't know

R14f. The level of support provided by SCE staff
#Rating from 1 to 5
98 Refused
99 Don't know

R14g. The knowledge and expertise of SCE's staff
#Rating from 1 to 5
98 Refused
99 Don't know

R14h. SCE's program overall
#Rating from 1 to 5
98 Refused
99 Don't know

Because the goal of this research is to help SCE improve the services it provides its commercial customers, I'd like to get some additional insight into your experiences with SCE's <PROGRAM> program.

R15a

[If R14a-R14h = 1 or 2, ELSE SKIP TO R15b]

Can you elaborate on what was not satisfactory to you? [PROMPT IF NECESSARY]

&Explain Record response verbatim
98Refused
99Don't Know

R15b

[If R14a-R14h = 4 or 5, ELSE SKIP TO R16]

Can you provide some insight into what you found to be very satisfactory? [PROMPT IF NECESSARY]

&Explain Record response verbatim
98Refused
99Don't Know

R16

[If <NRA_flag> = 1. ELSE SKIP TO R18]

Our records indicate that you received an Energy Audit from SCE. Was (any of) the equipment that you installed among the recommendations made in the energy audit report you received? [Provide <PROGRAM_DATE_Nra> if needed].

1 Yes
2 No – SKIP to R18
97 Don't recall having an audit – SKIP to R18

98 Refused – SKIP to R18
99 Don't Know – SKIP to R18

R17

On a scale of 1 to 5, with 1 being “Not at all influential” and 5 being “Very influential,” how much did the audit influence you to participate in the incentive program and install this equipment?

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

R18

On a scale of 1 to 5 with a one meaning “not at all” and a 5 meaning “very much” how much did the incentive program improve your knowledge of the energy efficient technologies that would benefit your business?

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

R19

Using the same scale, compared to before you participated in this program, how much more confident are you about the energy savings you can expect to gain through energy efficient equipment?

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

R20

Again using the same scale, to what extent has participating in this program influenced your company to implement other projects or make other changes to reduce energy use?

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

Awareness of Other EE Programs

[ASK EVERYONE]

AP1

Aside from the program[s] we have been discussing today, are you aware of other programs or resources that are designed to promote energy efficiency for businesses like yours?

1 Yes
2 No – SKIP to AP3
98 Refused – SKIP to AP3
99 Don't Know – SKIP to AP3

AP2

What types of programs or resources can you recall? [RECORD ALL MENTIONS] [After each response prompt with “Can you recall any others?”]
(DO NOT READ LIST)

1 Express Efficiency

- 2 SPC / Standard Performance Contracting
- 3 SCE's Energy Audit
- 4 The A/C Quality Program
- 5 Business Solutions Center
- 6 California Solar Initiative
- 7 Capacity Bidding Program
- 8 Demand Response Programs
- 9 Distributor incentives
- 10 Direct Install Program
- 11 SCE EnergyManager®
- 12 Energy Star
- 13 Energy Optimization Services
- 14 Flex-your-Power
- 15 Instrumentation Lending Program
- 16 Integrated Lighting Solutions
- 17 Refrigerator & Freezer Recycling
- 18 Schedule Load Reduction Program
- 19 Self-Generation Incentive Program
- 20 Southern California Lighting Technology Center
- 21 Technical Assistance and Technology Incentives (TA&TI)
- 22 Time-of-Use Rates
- 23 Rebate (unspecified)
- 24 No, not aware of any programs
- 97 Other programs (SPECIFY) _____
- 98 Refused
- 99 Don't know

AP3

[ASK AP3, If (AP2 not equal to 1) AND (<PROGRAM> = NRA or SPC), ELSE SKIP TO AP4]

Are you aware of SCE's Express Efficiency Rebate Program? [IF NEEDED: This program offers rebates on the purchase and installation of qualifying equipment that improves the energy efficiency of your business. To qualify, the equipment must be on SCE's itemized measures list.]

- 1 Yes
- 2 No
- 98 Refused
- 99 Don't Know

AP4

[ASK AP4, If (AP2 not equal to 2) AND (<PROGRAM> = NRA or EXPRESS), ELSE SKIP TO AP5]

Are you aware of SCE's Standard Performance Contracting (SPC) Program? [IF NEEDED: This program offers customized financial incentives for the installation of high efficiency equipment or systems, including both common and more specialized equipment. Incentives are calculated based on the type of measure and the energy savings over a 12-month period.]

- 1 Yes
- 2 No
- 98 Refused
- 99 Don't Know

AP5

[Ask AP5, If ((AP2 not equal to 3) AND (<PROGRAM> = SPC or EXPRESS)) AND ((<NRA_flag> not equal 1) OR (R16 = 97 or 98)), ELSE SKIP TO C1]

Are you aware of SCE's Energy Audit? [IF NEEDED: The energy audit involves an auditor coming to your facility and examining your equipment and asking questions about your energy use and your equipment. The auditor would provide energy saving information at the time of the audit and/or mails you

a written report with energy saving recommendations.]

- 1 Yes
- 2 No
- 98 Refused
- 99 Don't Know

Customer Background

We are almost finished. I'd just like to get some general background information about <BUSINESS> and your responsibilities there.

C1

What is <BUSINESS>'s primary business activity at this particular facility (<SERVICE ADDRESS>)?
[RECORD ONE; READ LIST IF NECESSARY]

- 1 Office
- 2 Retail (non-food)
- 3 College/University
- 4 School
- 5 Grocery Store
- 6 Restaurant
- 7 Health Care
- 8 Hospital
- 9 Hotel or Motel
- 10 Warehouse/Distribution
- 11 Construction
- 12 Community Service/Church/Temple/ Municipality
- 13 Industrial Process/ Manufacturing/ Assembly
- 14 Condo Assoc./Apartment Mgr.
- 15 Other (Please specify) _____
- 98 Refused
- 99 Don't Know

C2

What is your title/primary responsibility at <BUSINESS>?
[RECORD ONE; READ LIST IF NECESSARY]

- 1 Owner/President/CEO
- 2 Vice President/VP of Operations
- 3 General Manager/Regional Manager
- 4 Facility/Operations Manager
- 5 Energy Manager/Engineer
- 6 Other (Please specify) _____
- 98 Refused
- 99 Don't Know

C3

About how long have you held this position?

- &YR Years [Enter decimals if appropriate, e.g., 2.5 years)
- 98 Refused
- 99 Don't Know

C4

About how many full-time employees work at this location?

&EMP # of employees

98 Refused

99 Don't Know

C5

Does <BUSINESS> own or lease this facility?

1 Own

2 Lease

98 Refused

99 Don't Know

C6

Is the company headquarters in Southern California or elsewhere? (outside of SCE's service area, specifically)

1 HQ in Southern CA

2 HQ elsewhere in CA

3 HQ elsewhere, outside of CA

98 Refused

99 Don't Know

End Survey

One last question...

E1.

What types of services, information, or other support would you like to receive from SCE in the future?

&Explain Record response verbatim

98 Refused

99 Don't Know

That's all of the questions I have for you today. Thank you so much for your time, your insights are extremely valuable to SCE. Have a great day!

BIS PROCESS EVALUATION

PARTICIPANT IN-DEPTH INTERVIEW GUIDE

Interview Objectives

- Characterize customer experiences with SCE's BIS program and the adequacy of support provided by SCE and its representatives.
- Characterize the effectiveness of the NRA program in promoting the Express Efficiency and SPC program elements.
- Characterize the extent that the BIS program components are integrated in program delivery.
- Solicit suggestions for program improvements.

Program Descriptions

EXPRESS EFFICIENCY / EXPRESS

This program offers fixed rebates on the purchase and installation of qualifying equipment that improves the energy efficiency of your business. To qualify, the equipment must be on SCE's itemized measures list.

ENERGY AUDIT / NONRES AUDIT / NRA

The energy audit involved an auditor coming to your facility to examine equipment and learn about your energy use patterns. The auditor would have left energy saving information at the time of the audit and/or mailed you a written report with energy saving recommendations.

STANDARD PERFORMANCE CONTRACTING / SPC

This program offers customized financial incentives for the installation of high efficiency equipment or systems, including both common and more specialized equipment. Incentives are calculated based on the type of measure and the expected energy savings over a 12-month period.

Interview Prep

Interviewer	
Interview Date	
Start/Stop Times	

EMI_ID	
Contact Name	
Company	
Business Location	

NRA?		Date:		
SPC?		Date:	EndUse/ Proj Description	
EXP?		Date:	EndUse/ Proj Description	

Identify Appropriate Respondent

Q1a

Hello, this is <INTERVIEWER NAME> calling from Energy Market Innovations on behalf of Southern California Edison. This is not a sales call. May I please speak with <CONTACT> ?

[IF NEEDED]: my understanding is that <CONTACT> is responsible for making energy-related decisions for your firm at <SERVICE ADDRESS> and was listed as the primary contact for SCE when <Company> participated in SCE's <Program>. May I please speak with him/her?

1 No, this person no longer works here → Is there someone else that is involved with facility improvements or building operations that might be familiar with <company>'s participation in SCE's program? [Repeat introduction with new contact]

2 No, this person is not available right now [Ask when available or leave message.] **CALL BACK LATER**

3 Yes – SKIP to Q2

97 No, other reason (THANK & TERMINATE)

Q2

Hello, my name is <INTERVIEWER NAME> calling from Energy Market Innovations on behalf of Southern California Edison. We're calling to do a follow-up survey about your firm's participation in the <PROGRAM> program. Do you recall participating in <PROGRAM> on or about <PROGRAM DATE>?

1 Yes → continue to Q3

2 No → [Describe program and ask if they were involved. If still no recall → Can I speak with someone who is likely to be responsible for facility improvements?]

3 There is no one here with information on that address/wrong address – THANK & TERMINATE

[IF NEEDED] EMI is an independent consulting firm hired by SCE to learn about customer experiences with its energy efficiency programs and to help SCE improve its programs for the future.

[IF NEEDED] This is a very important fact-finding survey with companies that have recently participated in an energy efficiency program sponsored by SCE. We are NOT interested in selling anything, and we are primarily interested in gaining your feedback of SCE's program to help SCE improve the services it provides to its customers in the future. Your responses will not be connected with your firm in any way and will be summarized with responses we get from other businesses that we talk with.

Q3.

Great. Are you the person responsible or were you involved with your company's decision to participate in the program, or were you the main point of contact with SCE?

1 Yes → Great. We would like to ask you some questions about this program, which should only take about 15 to 20 minutes. Is now a good time, or is there a time we can call you back tomorrow?

2 No → Ask for contact name and repeat introduction in Q2.

Introduction

When connected with appropriate respondent for scheduled interview:

Repeat introduction and purpose of survey.

According to the information provided to us from SCE, <COMPANY> participated in the <PROGRAM> and <PROGRAM>, [mention timeframe when participated]. Does that sound right to you? I realize that this was a while ago, but your feedback on this program/these programs will be very valuable to SCE, particularly now as it is currently planning its next generation of energy efficiency programs.

[IF NEEDED] This should only take about 15 to 20 minutes.

Your responses will be summarized with those we get from other businesses that participated in SCE's programs.

Nonresidential Audit Experience Module

Again, according to SCE's records, an audit was conducted at <SERVICE ADDRESS> on <DATE>. Is that correct?

A1

Do you remember how you first learned about SCE's Energy Audit program?

A2

Thinking back to when you first learned about the audit program, what were the circumstances surrounding your decision to participate? (What were the factors leading up to your decision to participate in the audit program?)

[PROBES: Was the company planning a major renovation project/expanding operations? Company commitment to reduce operating costs? Corporate commitment to reduce carbon footprint? Just needed some guidance on what to do/how to prioritize? Who was involved in the decision to have the audit?]

AA.1

Can you please spend just a minute or two describing the audit process for me? Start with what happened after the audit was scheduled. I'm particularly interested in your experience with the audit process in terms of timing, the professionalism and expertise of the auditor, what areas of your company's building/facility were covered by the audit, etc.

[PROBES: Was the audit what you expected? Did it disrupt any normal business operations? Did you walk through the building with the auditor?]

Now I'd like to understand how the results of the audit were communicated to you and ask about any follow-up consultation that you received regarding the audit results.

A7

Did you receive a written report that summarized the audit and provided recommendations for energy efficiency improvements?

[PROBE if NO – Were the audit results provided to you in another format, over the phone or emailed?]

[PROBE if YES – Can you describe the audit report to me that you received? Was the level of detail adequate and what you expected? Did the report accurately represent your company's existing equipment and energy use? Was it provided to you in a timely manner after the audit walk-through? Were the recommendations reasonable for your company? Is there room for improvement here? How so?]

AA.2

Did you share the audit results with others in your company (or anyone else outside company?) [Such as upper management, etc.]

A8

Did an SCE representative follow up with you or someone else at your company to discuss the audit results and recommendations? [SCE rep could be auditor or SCE account manager, etc.]

[PROBE: Was this follow-up consultation helpful and meaningful to you? Did they spend enough/not enough time with you? Is there room for improvement here? How so? Did this person mention SCE's incentive programs?]

A9

Do you recall any specific recommendations in the audit report?

AA.3

To what extent did the audit report provide information/guidance regarding next steps for implementing the audit recommendations?

[PROBES: Did the report refer you to SCE's rebate programs? Refer you to other resources? Did it provide specific contact information? Was this adequate? Is there room for improvement here?]

A12a

Has your company implemented any of the audit recommendations / installed recommended equipment?

AA.4

To what extent did the audit facilitate this project?

[PROBE: If the audit had little to no bearing on the installation of the recommended equipment, why not? What were the circumstances that facilitated the project?]

IF YES - IMPLEMENTED AUDIT RECOMMENDATIONS

AAXX

Did your company apply through one of SCE's energy efficiency programs to receive a rebate for installing the recommended equipment?

[PROBE if YES: What program? And did you receive the rebate \$\$ and is the project complete?] Great, I'm going to ask you a few questions about that program in just a minute.

[PROBE if NO: Were you aware of SCE's programs? If were aware, do you remember a particular reason or circumstances why your company did not apply for a rebate for implementing the recommended project? How did you become aware of the program? Auditor? SCE Rep? Audit Report?]

A13

Has your company purchased and installed any of the recommended equipment without applying for a rebate from SCE?

If YES → Do you remember why you did not apply for incentives for that project?

IF NOT IMPLEMENTED AUDIT RECOMMENDATIONS

A14

What are the primary barriers your company faced in implementing the audit recommendations?

[PROBE if necessary: Was it a timing issue, lack of financing for remainder of project cost, project not approved by management, didn't know what to do next, etc.]

Rebate/Incentive Program Module

Thanks, this is very valuable information.

[If <ENDUSE> = Lighting, Process, Refrigeration, Space Cooling, and/or HVAC]

Now I'd like to ask you about the <ENDUSE> project(s) you received incentives for.

[Note: "Process" projects include: Air compressor systems, VSDs, Economizers, Heat pumps, Injection molding machine replacements, Motors, Insulation, Pumping systems, Dryers, etc,...]

[If <ENDUSE> = Other, Multiple]

Now I'd like to ask you about the project you received incentives for. Our records show that you completed a project that may have involved installing system controls, restaurant equipment, motors, software, or other types of projects.

[If missing <ENDUSE>]

Now I'd like to ask you about the project you received incentives for.

R1

Do you remember how you first learned about the financial incentives available through the <PROGRAM> program? [If respondent indicated audit recommendations were implemented and got incentives from SCE, skip this question or confirm it's the same project]

RR.1

What were the circumstances surrounding your decision to participate? What were the factors leading up to your decision to participate in the audit program?

[PROBES: Was the company planning a major renovation project/expanding operations? Company commitment to reduce operating costs? Corporate commitment to reduce carbon footprint?? Who was involved in the decision to move forward with this project and apply for a rebate from SCE?]

RR.2

Can you spend just a minute or two and describe the process that you went through to complete and submit the required incentive application? I'm particularly interested in who took the lead in the project, the ease/difficulty you experienced in completing the required forms, what resources were utilized to complete the application, etc.

[PROBES: Did you encounter any difficulty completing the application? Did you consult any resources such as the SCE website, program manual, online savings calculator, or an account representative to complete the application?]

R5a

Who was primarily responsible for preparing the incentive application (including the required supporting documentation)?

[PROBE: If not the respondent, ask if person was employed by the company, was a consultant contractor (and what type), etc.]

R5b

Did [you/they] experience any difficulties or unreasonable delays in preparing/submitting the incentive application? Please elaborate – What was the source of difficulty/delay?

[PROBES: Were the forms easy to understand? Was it clear to you what you needed to submit? What was the respondent's recollection of the ease of equipment selection, performance of equipment once installed, rebate amount relative to total project cost, level of support provided by SCE, simplicity of application procedures, etc.]

Awareness of Other EE Programs

AP1

Aside from the program[s] we have been discussing today, are you aware of other programs or resources that are designed to promote energy efficiency for businesses like yours?

AP2

What types of programs or resources can you recall?

[PROBES: Do you know what organization/company administers that program? After each response prompt with "Can you recall any others?"]

AP3 - IF HAS NOT PARTICIPATED IN EXPRESS EFFICIENCY AND DID NOT MENTION SCE's EXPRESS EFFICIENCY PROGRAM ABOVE in AP2

Are you aware of SCE's Express Efficiency Rebate Program? [PROBE – describe program if necessary.]

AP4 - IF HAS NOT PARTICIPATED IN SPC AND DID NOT MENTION STANDARD PERFORMANCE CONTRACTING / SPC PROGRAM

Are you aware of SCE's Standard Performance Contracting (SPC) Program? [PROBE – describe program if necessary.]

AP5 - IF "EXPRESS ONLY" AND DID NOT MENTION NRA/AUDIT PROGRAM

Are you aware of SCE's Energy Audit?

[PROBE: If yes, how did you learn about it?]

Customer Background

We are almost finished. I'd just like to get some general background information about <BUSINESS> and your responsibilities there.

C1

What is <BUSINESS>'s primary business activity at this particular facility (<SERVICE ADDRESS>)?
[RECORD ONE]

- 1 Office
- 2 Retail (non-food)
- 3 College/University
- 4 School
- 5 Grocery Store
- 6 Restaurant
- 7 Health Care
- 8 Hospital
- 9 Hotel or Motel
- 10 Warehouse/Distribution
- 11 Construction
- 12 Community Service/Church/Temple/ Municipality
- 13 Industrial Process/ Manufacturing/ Assembly – type?
- 14 Condo Assoc./Apartment Mgmt.
- 15 Other (Please specify) _____
- 98 Refused
- 99 Don't Know

C4

About how many full-time employees work at this location?

- &EMP # of employees
- 98 Refused
- 99 Don't Know

C5

Does <BUSINESS> own or lease this facility?

- 1 Own
- 2 Lease
- 98 Refused
- 99 Don't Know

C6

Is the company headquarters in Southern California or elsewhere? (outside of SCE's service area, specifically)

- 1 HQ in Southern CA
- 2 HQ elsewhere in CA
- 3 HQ elsewhere, outside of CA
- 98 Refused
- 99 Don't Know

End Survey

One last question...

E1.

What types of services, information, or other support would you like to receive from SCE in the future?

That's all of the questions I have for you today. Thank you so much for your time, your insights are extremely valuable to SCE. Have a great day!

Express Efficiency Near-Participant In-depth Interview Guide

Interview Summary

Interviewer	
Interview Date	
Start/Stop Times	

EMI_ID	
Contact Name	
Company	

Strata	
--------	--

Brief Interview Summary:

SCE Business Incentives and Services Process Evaluation Near Participant Interviews

Overarching research questions: Why are applications discontinued and what, if anything might prevent this? Do firms with discontinued applications go on to participate later? Of those that do not go on to participate, what prevented them from participating?

RESPONDENT SCREENING

Hello, my name is _____ and I am calling from Energy Market Innovations. We are working with Southern California Edison to evaluate the success of their Express Efficiency rebate program.

Our records indicate that your firm submitted an application to participate in this program but later withdrew that application or had an application that expired. We are interested in learning more about your experiences. Are you the best person to speak with about your application? [Provide service address if necessary.]

If not, note better person, and ask if they are available: _____

I'd like to ask you some more questions about your application for this program. This should take approximately 10 minutes. Is this a good time to talk? All information you provide will be confidential.

If cannot talk now, schedule a call back: _____ (time / date)

1. Status of Application

There are many reasons why applications are withdrawn or expire, and we would like to understand these reasons to help SCE better support its customers in the application process. I am interested to learn more about the current status of this application...

1.1 *My records show that your firm submitted an application for the (end use) project in (month) of (year)? Do you recall this specific application?*

- 0 No
- 1 Yes

1.2 *Did your firm ever end up re-submitting this application for the same project or some modification of the initial project?*

- 0 No – did not re-submit.
- 1 Yes – re-submitted same as original project.
- 2 Yes – re-submitted with modified project.
- 3 Yes – re-submitted as part of another project we were doing.
- 4 Yes – Other (please describe).

(If NO, continue with “2. Discontinued Applications” questions.)

(If any of YES responses, skip to “3. Resubmitted Applications” questions.)

2. Discontinued Applications

2.1 *What types of equipment did this project involve? Please describe.*

2.2 *Briefly, why was your rebate application discontinued? (Probe)*

2.3 *Have you installed this equipment without submitting the application? (Probe: Why or why not?)*

2.4 *Do you intend to resubmit this application?*

- 0 NO
- 1 YES

If YES: *Will this project be the same or different in scope as the one for which you previously submitted an application?*
Please describe.

2.5 *What, if anything, might have enabled your firm to continue with this project?*

2.6 *Is there anything that SCE might have done that would have enabled your firm to continue with this project?*

2.7 *Would any of the following have helped to continue with your application?*

- 1 *Assistance in completing your application? Please describe.*
- 2 *Additional technical information or analysis? Please describe.*
- 3 *Increased Incentives? Please describe.*
- 4 *Financing assistance? Please describe.*

2.8 *What was the approximate total cost of this project, before subtracting out incentives from SCE?*

2.9 *Is there anything else you can tell me that you think might help SCE to minimize the number of withdrawn or expired applications? Please describe.*

\

3. Resubmitted Applications

3.1 *What is the current status of this project?*

- 1 Installed
- 2 Installation in process (date of expected completion _____)
- 3 Installation not yet started (date of expected completion _____)

3.2 *Briefly, what happened with your original rebate application? (Probe)*

3.3 *What types of equipment did this project involve? Please describe.*

3.4 *What prompted your firm to re-submit its application?*

(Ask 3.5 if the project in the re-submitted application was NOT the same as the original project. Else skip to 3.6.)

- 3.5 In what ways was this project different from the original application?
Please describe.
- 3.6 *What might have enabled your firm to continue with this project without the original application being discontinued?*
- 3.7 *Would any of the following have helped to continue with the initial application?*
- 1 *Assistance in completing your application? Please describe.*
 - 2 *Additional technical information or analysis? Please describe.*
 - 3 *Increased Incentives? Please describe.*
 - 4 *Financing assistance? Please describe.*
- 3.8 *What was the approximate total cost of this project, before subtracting out incentives from SCE?*
- 3.9 *Is there anything else you can tell me that you think might help SCE to minimize the number of withdrawn or discontinued applications? Please describe.*

4. ALL – Knowledge/Awareness of BIS

- 4.1 *On a scale of 1-5, with “1” being very unsatisfied, and “5” being very satisfied, indicate how satisfied you were with... SCE’s program overall.*

What is your reason for giving that score?

- 4.2 *Are you aware of SCE’s Energy Audit Program?*

- 0 NO
1 YES

[IF NEEDED: The energy audit involves an auditor coming to your facility and examining your equipment and asking questions about your energy use and your equipment. The auditor provides energy saving information at the time of the audit and/or mails you a written report with energy saving recommendations.]

If YES: *Has your business received an Energy Audit from SCE?*

- 0 NO
1 YES

If YES: *On a scale of 1 to 5, with 1 being “Not at all influential” and 5 being “Very influential,” how much did the energy audit influence you to participate in the incentive program and install this equipment?*

5. ALL - Background

- 5.1 *What is [BUSINESS NAME]’s primary business activity at this particular facility?*
- 5.2 *About how many full-time employees work at this location?*
- 5.3 *Does your business own or lease this facility?*

6. ALL - End

- 6.1 We’re just about done. Is there anything else you’d like to tell us about your experience with the program that would help us make it better?

Thank you for your time and your feedback.

Trade Ally/Vendor In-depth Interview Guide

Interview Summary

Interviewer	
Interview Date	
Start/Stop Times	

EMI_ID	
Contact Name	
Company	

SPC/Express	
Active/Inactive	
End Use (Lighting/Other)	

Brief Interview Summary:

Business Incentives and Services Process Evaluation Trade Ally/Vendor In-depth Interview Guide *Version: 08-06-2009*

Overarching research goals: Gauge vendors' satisfaction with the SPC and Express Efficiency programs, and determine the extent to which they are helping SCE to market and implement the programs.

RESPONDENT SCREENING

Hello, my name is _____ and I am calling from Energy Market Innovations. We are working with Southern California Edison to help evaluate the success of their [Express Efficiency/Standard Performance Contracting] rebate program. We are speaking with contractors and vendors who have helped businesses participate in this program to get feedback on your experiences.

Are you the best person to speak with about this program?

Yes: (record name) _____

No: *Is there another person available who may be more familiar with this program?* (record name) _____

Is this a good time to talk with you about the program? I have a set of questions that should take approximately 15 minutes, depending upon your experiences and involvement with the program. All information you provide is confidential and anonymous.

If cannot talk now, schedule a call back: _____ (time / date)

1. BACKGROUND

1.1 *The information I have from SCE indicates that your firm sponsored applications during 2006-2008 for the [SPC / Express program]. Is this correct?*

Yes – participated in SPC / Express program

No – did not participate in that program shown in your records

No – participated in (other) program

No – participated in both programs

1.15 *My records show that you sponsored _____ applications during 2006-2008. Does that sound about right?*

No - How many applications did your firm sponsor? An estimate would be fine.

OK, thanks -- The questions I'm going to ask you about today are about your experiences with the [SPC/Express Efficiency] program. [Provide description of program if asked:]

Express: *This program offers rebates on the purchase and installation of qualifying equipment that improves the energy efficiency of your customer's business. To qualify, the equipment must be on SCE's itemized measures list. Do you remember helping one or more of your customers participate in this program?*

SPC: *This program offers customized financial incentives for the installation of high efficiency equipment or systems, including both common and more specialized equipment. Incentives are calculated based on the type of measure and the energy savings over a 12-month period. Do you remember helping one or more of your customers*

participate in this program? [If necessary: "SPC" stands for "Standard Performance Contract."]

- 1.2 *For background, would you please give me a brief overview of how your business has been involved with [Express/SPC]?*
- 1.3 *Approximately how many years has your firm been working with this program?*
- 1.4 *And how would you characterize the types of services/products that you provide for your customers or clients?*

Lighting

HVAC

Other (specify)

- 1.45 *When you sponsor applications for [Express/SPC] applications, what type of measure is it usually?*
- 1.5 *How would you characterize the types of customers that your firm predominantly works with (e.g., industry type, size of customer, facility type)?*
- 1.6 *Overall, on a scale of 1 to 5, with a 1 meaning "very unsatisfied" and a 5 meaning "very satisfied," how satisfied are you with your experiences in working with this program?*

If 3 or less ask: And what is the reason for that score?

Feedback on Program Design

I am interested in your feedback on how the [Express Efficiency/SPC] program works overall...

- 2.0 *What do you see as the primary strengths of this program?*
- 2.1 *Are there any aspects of the program that pose particular problems or challenges for you or your customers? (if Yes) Could you describe them, please?*
- 2.2 *Are there any high efficiency technologies or products that you would recommend adding to the list of items/measures eligible for rebates/incentives?*

And why is that?

- 2.3 *Are the incentive levels adequate to encourage customers to select energy efficient equipment options? If not, where would you recommend changes?*
- 2.4 *Are there any aspects of the [Express/SPC] application process that you would recommend be modified? Please describe.*
- 2.5 *Have any of your customers assigned the SCE rebate/incentive to you/your business?*

If Yes: *On a scale of 1 to 5, with a 1 meaning “very unsatisfied” and a 5 meaning “very satisfied,” how satisfied were you with the time it took to receive your rebate after submitting the application?*

- 2.6 *Is there anything else about the design of the program that you would recommend changing? Please describe. [Probe: Is there anything SCE can do to assist you with this program?]*

3. Feedback on Program Marketing

Next, we are interested in your feedback on program marketing efforts...

- 3.1 *Do you find that customers are generally aware of this program, or is it more often something that you bring to their attention?*
- 3.2 *Are there ways in which SCE could market this program more effectively? Please describe.*

4. Marketing: “Active” Vendors

My information shows that you have worked with a number of applications for the [Express Efficiency/SPC] program. We would like to get your perspective on what motivates you to help your customers participate in this program...

- 4.1 *What are some reasons you have worked with so many applications?*
- 4.2 *I am interested in learning how you market this program with your customers. Could you please describe this process for me?*
- 4.3 *Are there certain types of decision makers at those businesses that you normally target from a sales perspective?*
- 4.4 *In what ways does this program help your business? (Probe: Does the program make it easier for you to sell your services or products?)*

5. Marketing: “Inactive” Vendors

My information shows that your business has only been involved with a few applications for the [Express Efficiency/SPC] program. We would like to understand what, if anything, might prevent your firm from helping more of your customers participate in this program ...

- 5.1 *Other than what you’ve already described, are there particular aspects of the program that have prevented you from sponsoring more customers’ applications? Please describe. (Probe: What, if anything, would encourage you to work with more customers for the [Express Efficiency/SPC] program?)*
- 5.2 *(SKIP if no response to 5.1) Are there some specific examples that you might provide of instances where the program did not work for you or your customers?*
- 5.3 *How can SCE help you market this program to your customers?*

6. Business Impacts and Trends

- 6.0 *Who are the prominent manufacturers or distributors you rely on for equipment eligible for the [Express/SPC] program?*
- 6.1 *Has your involvement in this program affected the types of equipment that you service/install? Please describe.*
- 6.2 *Have you noticed any recent trends related to equipment choices that customers are making? Please describe.*
- 6.3 *How active do you expect your firm to be in this program over the next year -- more / less / about the same? Please describe.*

7. Program Overlap

[Up to this point, the interview has been about either SPC or Express. This section asks about the other program. For example, if we’ve been asking them about Express, this section asks about SPC.]

- 7.1 *SCE offers another incentive program called [Express Efficiency/SPC].*

[Provide description:]

Express: *This program offers rebates on the purchase and installation of qualifying equipment that improves the energy efficiency of your*

customer's business. To qualify, the equipment must be on SCE's itemized measures list.

SPC: *This program offers customized financial incentives for the installation of high efficiency equipment or systems, including both common and more specialized equipment. Incentives are calculated based on the type of measure and the energy savings over a 12-month period. [If necessary: "SPC" stands for "Standard Performance Contract."]*

Has your business sponsored applications for this program?

No – Why is that?

Yes – Having worked with both SPC and Express Efficiency, how would you compare the two?

8. Firmographic Information

We're just about done.

- 8.1 *For comparison purposes, about how many employees does your company have?*
- 8.2 *Is there anything else you'd like to tell us about your experience with the [Express/SPC] program?*

Thank you for your time!

**Business Incentives and Services Process Evaluation
Market Actor In-depth Interview Guide – SUPPLY SIDE**

Interviewer	
Interview Date	
Start/Stop Times	

EMI_ID	
Contact Name	
Agency Name	
Business Location	

Summary of Interview	
----------------------	--

**Business Incentives and Services Process Evaluation
Market Actor In-depth Interview Guide – SUPPLY SIDE**

Overarching research goals: Obtain perspectives on program design and operation from a variety perspectives, including supply chain market actors and private sector trade organizations. Depending on the orientation of the interview respondent, these interviews will seek to: 1) Determine whether the BIS program has an influence on the manufacturing or stocking practices of equipment manufacturers/distributors. 2) Determine opportunities for disseminating information regarding energy efficiency program offerings through manufacturers/distributors to their customers. 3) Determine the extent that the BIS programs successfully utilized a “local community involvement approach.”

RESPONDENT SCREENING

Hello, my name is _____ and I am calling from Energy Market Innovations. We are working with Southern California Edison – a large electric utility in Southern California. We’re doing some research to help SCE redesign its commercial-sector programs, and are seeking input and feedback from companies in the

equipment supply chain (OEMs, mfrs & dist). We are speaking with equipment manufacturers and distributors that produce or sell equipment that might qualify for energy efficiency rebates through one of SCE's incentive programs.

(If distributor: Verify that they serve the Southern California market.)

Can I speak with someone who might have knowledge of and possibly even worked with SCE regarding its incentive program offerings? This might be (interviewer will select the most appropriate options to mention, depending on orientation of organization) a Vice President of Operations, Regional Vice President/General Manager, possibly a Governmental/Utility Affairs liaison, .

Yes: (record name, title, and contact information –including email)

(Repeat intro with contact)

Are you the best person for me to speak with?

No: *Is there another person available who may be more familiar with these programs?* (record name & contact information – including email)

Is this a good time to talk? I have a few questions that should only take approximately 15 minutes of your time. All information you provide is confidential and anonymous.

If cannot talk now, schedule a call back: _____ (time / date)

Section 1. BACKGROUND

First, I'd like to confirm a little background information about {company/organization}.

- 1.1 Would you describe {company} as primarily an OEM, equipment manufacturer, distributor/supplier, contractor, energy efficiency service provider, or something else?
- 1.2 What types of equipment does {company} {manufacture/stock/sell}?
(Do not read list)
Lighting (fixtures, lamps)
Lighting controls/occupancy sensors
HVAC (AC, Boilers, Chillers)
HVAC controls/occupancy sensors
Motors/Variable speed drives
Refrigeration (gaskets/curtains ..)

Cooking (stoves, fume hoods..)
Other

- 1.3 How would you characterize the commercial customers (end-users) that ultimately purchase and install this equipment? (e.g., industry type, size of customer, business type)
(For example, small restaurants, large refrigerated food distribution warehouses, etc.)
- 1.4 Very generally, can you describe the supply chain for this equipment? *(In other words, what is the distribution channel through which this equipment is shipped from manufacturer and supplied to these final end-users?)*

Section 2. AWARENESS

As I mentioned earlier, we're doing some research to get some feedback from OEMs, manufactures and equipment suppliers and other industry groups that will help Edison improve its energy efficiency programs that offer rebates for high efficiency equipment.

- 2.1 To what extent are you aware of SCE's energy efficiency programs that provide financial incentives to its commercial sector customers for the purchase and installation of energy efficient equipment?
- Not at all – never heard of anything like that → Ask if there's someone else at the company that might be familiar with the programs.
- Somewhat – know that SCE has program, or knows they offer rebates, just in general
- Very Much – has specific knowledge about program details, measures, incentives, etc.
- 2.2 Do you know if any of the equipment that {company} manufactures/stocks is (or was) eligible for rebates through SCE's programs?

Ask If SOMEWHAT or VERY AWARE of SCE's programs

(Else SKIP to Section 4):

Section 3. Interaction with / Influence of Program

- 3.1 Have you or someone else at your company interacted with SCE in any way relating to its energy efficiency programs? *(Probes -- Has someone from SCE contacted you to provide you with information about the incentives? Have they asked for input about what measures should be covered by the program? etc.)*

If yes, please describe.

Probes: Has this “interaction” been valuable to {company}? Did SCE provide you with the information you needed?

IF EQUIPMENT MANUFACTURER

- 3.2 To what extent do you feel that SCE’s incentive programs have influenced the mix of equipment that {company} manufactures?
(In other words, have you increased production of the equipment that is rebated by SCE to meet increased demand? Have you fast-tracked time to market for a particular technology because it was included in the program?)

Not at all
Somewhat
Very Much

If yes – how so?

IF EQUIPMENT DISTRIBUTOR/SUPPLIER

- 3.3 To what extent do you feel that SCE’s incentive programs have influenced the mix of equipment that {company} stocks/inventories?
(For this question, we’re particularly interested if the company has had to change its product mix or inventory to meet demand for high efficiency equip generated from the program.)

Not at all
Somewhat
Very Much

If yes – how so?

4. ALL:

- 4.1 What do you feel is the best way for SCE to get information about their rebate program to {company} and other companies and organizations in the supply chain?
- 4.2 From your perspective, what is the “state of the industry” in terms of the standard equipment that final end users want (and are willing to pay for)? What features of {end use} equipment are most important and what do they look for?

- 4.3 In general, what do you feel are the primary factors that prevent “the market” from demanding higher efficiency {end use} equipment?
- 4.4 Do you have any input or recommendations for how SCE can best provide information to the market place about its rebate programs? Please describe.
- [Probe: Do you see any opportunity for partnering with SCE?
Marketing your products as eligible for rebates from SCE, etc.]
- 4.5 Do you have any suggestions or insight into how SCE can improve the services and financial incentives offered through its commercial sector energy efficiency programs?
- 4.6 Can you refer me to any prominent industry trade associations or other organizations for this research?

5. END - BUSINESS CHARACTERISTICS

Finally, I'd like to ask you a couple last questions so we can understand how big {company} is in relation to other we're talking to.

- 5.1 How many full-time employees are at your business?
- 5.2 What was {company}'s total revenue in 2008?
- [If a distributor:]
- 5.3 How many locations does {company} have in the US?

Thank you for your time!

**Business Incentives and Services Process Evaluation
Agencies In-depth Interview Guide**

Interviewer	
Interview Date	
Start/Stop Times	

EMI_ID	
Contact Name	
Agency Name	
Business Location	

Summary of Interview	
----------------------	--

Business Incentives and Services Process Evaluation Agencies In-depth Interview Guide

Overarching research goals: Determine the extent of awareness of BIS among local organizations (including CBOs, economic development associations, ethnic business associations, chambers of commerce, and trade associations), and determine potential for partnering with/leveraging such organizations to increase outreach efforts at the local level.

RESPONDENT SCREENING

Hello, my name is _____ and I am calling from Energy Market Innovations. We are working with Southern California Edison to help evaluate the success of their rebate and energy audit programs. We are speaking with organizations such as yours to learn about the services you provide your members/community and get a sense of the opportunities for helping your members participate in SCE's energy efficiency programs.

Are you the best person to speak with about this?

Yes: (record name) _____

No: *Is there another person available who may be more familiar with SCE's programs?* (record name)

Is this a good time to talk? I have a set of questions that should take approximately 15 minutes, depending upon your awareness, experiences, and involvement with the program. All information you provide is confidential and anonymous.

If cannot talk now, schedule a call back: _____ (time / date)

1. BACKGROUND

- 1.1 For background, would you please give me a brief overview of the types of services you provide for members/businesses in your community?
[Probe: What types of businesses do you focus your resources on? Are your members countywide, or specific to one city? How many members?]
- 1.2 How do you provide your member businesses with information and services? [Probe: Do you send mailings/newsletters, hold regular meetings, conferences, or provide seminars?]

2. GENERAL AWARENESS OF SCE'S EFFICIENCY PROGRAMS

- 2.1 Are you aware of SCE's energy efficiency programs that provide energy efficiency recommendations and financial incentives to business for the purchase of energy efficient equipment?

[General BIS description may be helpful: SCE provides rebates or financial incentives for businesses that install energy efficient equipment. They also provide onsite energy audits, which provide personalized energy saving information and recommendations.]

- 2.2 Have you ever partnered with SCE to provide information regarding energy efficiency to the businesses you work with? ["Partnering" could be as simple as receiving marketing materials from SCE to supply to their members. Or it could be a partnership in the literal sense.]

IF YES: CONTINUE TO SECTION 3

IF NO: SKIP TO SECTION 4

3. PROGRAM INVOLVEMENT (THOSE WHO HAVE "PARTNERED" WITH SCE)

- 3.1 Please describe how you are working together with SCE.

- 3.2 Have you been involved/worked with SCE's Energy Audit Program?

The energy audit involves an auditor coming to your facility and examining your equipment and asking questions about your energy use and your equipment. The auditor provides energy saving information at the time of the audit and/or mails you a written report with energy saving recommendations.

0 NO
1 YES

If NO: Are you aware of this program?

0 NO
1 YES

- 3.3 Have you been involved/worked with SCE's Express Efficiency rebate program?

This program offers rebates on the purchase and installation of qualifying equipment that improves the energy efficiency of your customer's business. To qualify, the equipment must be on SCE's itemized measures list.

- 0 NO
- 1 YES

If NO: Are you aware of this program?

- 0 NO
- 1 YES

3.4 Have you been involved/worked with SCE's Standard Performance Contracting program?

This program offers customized financial incentives for the installation of high efficiency equipment or systems, including both common and more specialized equipment. Incentives are calculated based on the type of measure and the energy savings over a 12-month period. [If necessary: "SPC" stands for "Standard Performance Contract."]

- 0 NO
- 1 YES

If NO: Are you aware of this program?

- 0 NO
- 1 YES

The next set of questions I am going to ask is about your involvement with the Energy Audit/Express Efficiency/SPC Program(s).

3.5 Approximately how many years has your organization been promoting this/these program(s)?

3.6 On a scale of 1 to 5, with 1 being "Not at all" and 5 being "Very much," please rate your satisfaction in working with these SCE programs.

What is your reason for giving that score?

3.7 Have you heard any feedback from any of your member businesses on --- whether they have participated and what their experience has been? Please describe.

3.8 How do efficiency programs like these help your member businesses?

SKIP TO SECTION 5

4. PROGRAM AWARENESS (THOSE WHO HAVE NOT “PARTNERED” WITH SCE)

4.1 Are you aware of SCE’s Energy Audit Program?

The energy audit involves an auditor coming to your facility and examining your equipment and asking questions about your energy use and your equipment. The auditor provides energy saving information at the time of the audit and/or mails you a written report with energy saving recommendations.

0 NO
1 YES

4.2 Are you aware of SCE’s Express Efficiency rebate program?

This program offers rebates on the purchase and installation of qualifying equipment that improves the energy efficiency of your customer’s business. To qualify, the equipment must be on SCE’s itemized measures list

0 NO
1 YES

4.3 Are you aware of SCE’s Standard Performance Contracting program?

This program offers customized financial incentives for the installation of high efficiency equipment or systems, including both common and more specialized equipment. Incentives are calculated based on the type of measure and the energy savings over a 12-month period. [If necessary: “SPC” stands for “Standard Performance Contract.”]

0 NO
1 YES

IF RESPONDENT IS NOT AWARE OF ANY BIS PROGRAMS, SKIP TO SECTION 5

[If Respondent is Aware of any BIS program:]

4.4 Are you aware of any of your member businesses participating in these program(s)?

4.5 Have you heard any feedback from any of your member businesses on --- whether they have participated and what their experience has been? Please describe.

4.6 How do efficiency programs like these help your member businesses?

[ALL:]

5. ASSISTANCE FROM SCE

Just a couple more questions.

- 5.1 What could SCE do to assist your organization in informing your members about opportunities for incentives and energy audits? [Would learning about energy efficiency rebates be important information to your members? What is important to your members? What are their priorities and what are they struggling with? What kind of topics are they interested in?]
- 5.2 How can SCE help businesses in your community to participate in these programs?

Thank you for your time and your feedback.