

Food Service Equipment Center Process Evaluation



Final Report Study ID: SCG0211.01

Prepared for Southern California Gas Company Prepared by KEMA Inc.

November 14, 2008





Table of Contents

1.	Exec	utive Summary	1-1
	1.1	Evaluation Objectives and Approach	1-1
	1.2	Results	1-2
	1.3	Estimated Therm Savings Not Currently Claimed	1-4
	1.4	Conclusion and Recommendations	1-5
2.	Intro	duction	
	2.1	Overview of the FESC	2-1
	2.2	Evaluation Objectives and Approach	
	2.3	Report Structure	2-4
3.	Туре	s of Equipment Presented at FSEC	3-1
	3.1	Equipment Presentations and Rebate Applications	3-1
4.	Interv	view results	
	4.1	Customer Interview Results	4-1
	4.2	Vendor Interview Results	.4-14
5.	Savir	ngs potential	5-1
	5.1	Potential Savings from Purchased Equipment	5-1
	5.2	Potential Savings from Corporate Equipment Specifications	5-4
	5.3	Potential Savings from Process Changes	
	5.4	Potential Savings from Changes in Operations and Maintenance	5-7
6.	Case	Studies	6-1
	6.1	The Counter	6-1
	6.2	Universal Studios Hollywood	6-3
	6.3	Royal Baking Company	6-6
7.	Reco	mmendations	7-1
	7.1	Capture More Savings from Existing Rebate Qualifying Purchases	7-1
	7.2	Increase the Number of Rebate Qualifying Purchases	7-4
	7.3	Capture Therm Savings from Process Improvements	7-5
	7.4	Restructure the Rebate Program to Increase Participation	7-5
	7.5	Continue to Document FSEC Efforts that Save Customer Energy	7-6
8.	Conc	lusion	8-1
9.	Appe	ndix A: Templates for Documentation	9-1
10.	Appe	ndix B: Customer Interview Guide	.10-1
11.	Appe	ndix C: Vendor Interview Guide	.11-1



Figures

	1 (
Figure 1-1 Framework for Alternate Documentation to Claim Savings under EER	
Figure 2-1 Test Kitchen at Food Service Equipment Center	
Figure 2-2 Sample FSEC Seminar Flyer	
Figure 3-1 Diagram of the Overlap in Participants	
Figure 3-2 Distribution of Therm Savings for Food Service Equipment	3-3
Figure 3-3 Distribution of Presentations to FSEC, Both Qualifying and Non-Qualifying	3-4
Figure 3-4 Estimated Monthly Trends of Rebate Applications and FSEC Visits	3-6
Figure 4-1 F1: For approximately what percentage of your equipment purchases do you typically	request
a demo at the FSEC? $(n = 22)$	
Figure 4-2 F4: Using a scale of 1-5, how likely are you to make equipment purchases without rec	
demonstration at FSEC? ($n = 25$).	
Figure 4-3 B5: Major Equipment Considerations during FSEC Demonstrations? $(n = 81)$	
Figure 4-4 B5a: Of the considerations you mentioned, which one(s) are the most important to you	
company? ($n = 29$)	
Figure 4-5 F3: For approximately what percentage of your FSEC visits were you handed a rebate	
application? ($n = 25$)	
Figure 4-6 B4: Non Rebate Qualifying Demos: Were You Aware that Other Equipment in Categories	
Qualified for Rebate? (If Applicable) $(n = 8)$	
Figure 4-7 B4a: How Did You Learn About These Models That Would Have Qualified For a Rel	
(Follow-up to B4) $(n = 8)$	
Figure 4-8 C1: Who filled out the rebate application? (Sample = 13)	
Figure 4-9 E2e: For customers that anticipate making a purchase in the coming year: On a scale of	
how likely are you to consider only rebate-qualifying equipment models? (n = 11)	
Figure 4-10 E2f: For customers that anticipate making a purchase in the coming year: On a scale	
how likely are you to apply for a rebate upon purchasing qualified equipment? (n = 11)	
Figure 4-11 E2d: For customers that anticipate making a purchase in the coming year: On a scale	
how likely are you to view this equipment at the FSEC to help you make your decision? (Sa	mple =
11)	4-12
Figure 4-12 F5: Has your business made any changes to your operational practices since your vis	it to the
FSEC? (n = 24)	4-13
Figure 4-13 F6: Has your business made any changes to your maintenance practices since your v	isit to the
FSEC? (n = 24)	
Figure 4-14. Average Percent of Vendors' Customers Who Attend an FSEC Presentation $(n = 9)$.	
Figure 5-1 Methodology for Estimating Savings from Equipment	
Figure 5-2 Back of the Envelope Savings Estimate	
Figure 5-3 Back of the Envelope Savings Estimate Related to Process Improvements	
Figure 5-4 SoCalGas O&M User's Guide for Natural Gas Foodservice Equipment	
Figure 5-5 ENERGY STAR Guide for Restaurants	
Figure 5-6 Back of the Envelope Savings Estimate Related to O&M Modifications	
Figure 7-1 Framework for Alternate Documentation to Claim Savings under EER	
Figure 7-1 Framework for Alternate Documentation to Claim Savings under EEK	



Tables

Table 1-1 Distribution of FSEC Presentations Regarding Equipment with Rebate Options	1-2
(2006 through 2008 Q1)	
Table 3-1 Distribution of Measures and Associated Savings across EER Applications	
Table 3-2 Distribution of FSEC Presentations Regarding Equipment with Rebate Options	3-4
Table 3-3 Comparison of Rebate Applications to FSEC Presentations	3-5
Table 4-1 Summary of Customer Interviews	4-2
Table 4-2 Summary of Vendor Interviews	4-15
Table 5-1 Number of FSEC Presentations of Energy Efficient Equipment	5-2
Table 5-2 Deemed Savings Related to Equipment Presentations	5-3
Table 5-3 Estimated Savings related to O&M Modifications to Presented Equipment that is Rebate	
Qualifying	





1. Executive Summary

Southern California Gas Company's Food Service Equipment Center (FSEC) in Downey, California, serves as a resource for a range of commercial food service entities from restaurants to schools to food processors. It is comprised of a state-of-the-art kitchen with over 160 pieces of equipment from 50 leading manufacturers. It provides information to visitors of the facility via an assortment of printed materials, coordinating with equipment vendors and offering in-house expertise. It offers a scheduling tool and many of their energy efficiency materials via their website (www.socalgas.com/business).

The FSEC is widely known in the industry for providing free presentations of commercial equipment, seminars and a test facility for commercial food service equipment. The free demonstrations and presentations of commercial cooking equipment bring together chefs, product development staff, equipment dealers, marketing representatives and others involved with the purchase of new cooking equipment and the development of new and revised recipes. Approximately 450 equipment presentations occur each year at the FSEC.

The FSEC is funded under the Statewide Education, Training and Service Program. Although the FSEC, itself, claims no quantitative therm savings, it serves an important role in educating customers about SoCalGas rebate programs and qualifying equipment options, about how different cooking equipment models offer various efficiency measures, and what operational and maintenance practices can yield more energy-efficient food preparation.

Under the SoCalGas Prescriptive Commercial Food Service Efficient Equipment Rebate (EER) program, customers can receive rebates on qualified food service and commercial equipment. This is the main channel by which SoCalGas gets "credit" for the therm savings associated with energy efficient cooking equipment within its service territory. This does not capture the full impact of the savings, however, since many customers who attend FSEC equipment presentations and go on to purchase higher efficiency equipment either do not go on to apply for a rebate or their food service facility is in part outside the SoCalGas service area. Furthermore, anecdotal evidence collected by FSEC staff suggests that, as a result of their visit to the FSEC, customers are also changing their cooking processes in ways that save energy.

1.1 Evaluation Objectives and Approach

The study objective was to evaluate the extent to which FSEC equipment presentations are leading to therm savings that are not being captured by the "Commercial Food Service Rebate" program, and provide recommendations on how to potentially quantify and attribute these savings to the FSEC.

KEMA, Inc., conducted in depth interviews with customers and vendors who visited the FSEC between 2006 and 2008 (Q1) to determine the extent to which FSEC equipment presentations are leading to therm savings that are not presently captured by the Commercial Food Service Efficient Equipment Rebate (EER) program and make recommendations accordingly. KEMA also analyzed the FSEC equipment presentation tracking data, the rebate program data and other food service information. These interviews and analyses allowed KEMA to assess the processes at the FSEC as well as the rebate process so that improvements might lead to SoCalGas claiming additional therm savings.



1.2 Results

Since many customers come to the FSEC to view multiple pieces of equipment, across several different visits, sometimes with different employees from the same company, the following terms are used to describe customer interactions with the FSEC.

- Customer visit refers to any instance a customer comes to the FSEC to view equipment on one day, whether they see one piece or several pieces of equipment and regardless of the number of company employees attending. Each visit is recorded by the date of the visit. A single customer may record several visits during the program cycle.
- Equipment presentation refers to each individual piece of equipment that was viewed during a customer's visit. A customer may receive several equipment presentations during one visit.

The majority of equipment presented at FSEC does not qualify for a rebate because there is no industry standard "efficiency threshold" for food service equipment, such as braising pans, deck ovens and kettles. Overall, about one third of FSEC presentations feature an energy efficient, rebate qualifying piece of food service equipment. According to the vendors, the penetration of energy efficient food service equipment is much lower than 34%. As such, the fact that about one in three of FSEC presentations address energy efficient equipment suggests that FSEC is effectively increasing awareness and exposure beyond what is normally seen in the market. Table 1-1 shows the categories of equipment for which rebates are available, and the relative frequency of which the rebate qualified models are presented to customers.

Commercial Measures with Rebate Qualifying Options	Number of FSEC Presentations	Number for Qualified Models	% Presentations for Qualified Models
Combination Oven	205	141	69%
Convection Oven	170	93	55%
Fryer	108	58	54%
Fryer, Large Vat	0	0	0%
Griddle	69	54	78%
Pressureless Steamer	36	8	22%
Rack Oven, Double	0	0	0%
Rack Oven, Single	22	1	5%
Sub-Total of Presentations re Equipment with Rebate Qualifications	610	355	58%
Sub-Total of Presentations re Equipment without Rebate Qualifications	421	0	0%
Total of All FSEC Presentations	1031	355	34%

 Table 1-1

 Distribution of FSEC Presentations Regarding Equipment with Rebate Options (2006 through 2008 Q1)



1.2.1 Customer interview results

The term "customer" applies to the individuals that attended the demonstrations on behalf of companies that are interested in purchasing food preparation equipment for their place of business. Customers play varying roles in their companies like executive chef, purchasing manager, owner, kitchen consultants and designers, and more. The companies they represent encompass a wide variety of business niches and scales from independently operated bakeries and pizzerias to amusement park restaurants, hotels, and fast food chains. Therefore, each customer is diverse, unique and schedules demonstrations for specific pieces of equipment to suit their particular needs.

Customers indicate the FSEC equipment presentations are highly influential in their purchase decisionmaking. When customers were asked how certain they were before the presentation that they would purchase the equipment they went in to see, the average response was 2.2 out of 5.0, where 5.0 was very certain. Customers directly rated the influence of the presentations a 4.6 out of 5.0 (where 5.0 is very influential) when asked how influential their visit was in their decision to purchase (or not to purchase).

These results are corroborated by the fact that customers often come in to the FSEC for equipment presentations when they need to make an equipment purchase. A majority of customers say they use the FSEC 75% or more of the time to see equipment before they make a purchase. Additionally, approximately 46 percent of customers indicate they have made changes to their operational practices as a result of visiting the FSEC. One example was shifting to a steamer instead of pots of boiling water on a range.

For customers who applied for a rebate for the equipment they purchased as a result of visiting the FSEC, most received assistance from SoCalGas staff to fill out the application form. Account executives and FSEC staff play a prominent role in assisting customers with the rebate application form.

1.2.2 Vendor interview results

The term "vendor" is used loosely to refer to the various upstream market actors that assist and sell cooking equipment to end use food service customers. Four main types of upstream market actors were interviewed:

- **Marketing representatives** generally represent several manufacturers and brands of cooking equipment. They perform a sales and marketing role for specific types of food service equipment and participate in Food Service Equipment Center presentations to show customers the equipment they represent.
- **Food service dealers** actually sell customers the equipment. When customers ask about different equipment, dealers often refer them to the marketing representative for the appropriate brand/type of equipment.
- **Food service designers** serve as consultants who assist with kitchen layout and design of restaurants. Designers bring construction and operational knowledge to assist with both the front and back of the house (dining area and kitchen areas). Designers can also assist with selection and purchase of equipment.
- **Manufacturers** design and build the equipment to be sold, and can respond to customer specifications for equipment, especially from large chain accounts.



The FSEC equipment presentations provide an opportunity for the customer to try out the different types to help them to make a decision. The vendors state they bring customers into the Center to show them equipment they may not be familiar with, such as new technology, different models and types of equipment, and for side-by-side comparisons between different manufacturers.

Vendors corroborate the customer interviews by saying customers may know they want a certain type of equipment, but they may not be sure exactly what type until they attend the FSEC equipment presentation. For example, one equipment dealer had a high end steak house that was interested in a new broiler. The dealer brought the customer in to FSEC to try cooking steaks on different broilers, such as an overfired broiler. The customer "fell in love with" a Montague broiler and ended up purchasing that.

Of the vendors interviewed, the marketing representatives were the most knowledgeable about the SoCalGas rebate program for food service equipment. All vendors were aware that rebates were available for select equipment. Most vendors interviewed were not aware of whether their customers got rebates for the equipment they purchased. This is mostly because marketing reps do not handle sales of the equipment lines. Generally, the vendors say they refer their customers to SoCalGas for questions related to the rebate program. One marketing rep said that all members of their rep group carry rebate forms, but he's not aware how often they hand them out.

The FSEC provides an important location for testing and trying out new equipment and processes and for educating customers about the rebate program. The overarching response from vendors is that the opportunity to touch and learn about the equipment in a neutral setting is invaluable.

1.3 Estimated Therm Savings Not Currently Claimed

Since FSEC equipment presentations have been shown to lead customers to both purchase rebate qualifying equipment without getting a rebate, and other process improvements related to new equipment purchases, this project also explored the magnitude of savings potential that could be potentially attributed to FSEC equipment presentations. We also examined research issues and methods for attributing these savings to FSEC.

Additional savings attributable to FSEC were estimated to be approximately 10% greater than the rebate program outcomes as a result of customers who attended demonstrations at FSEC going on to purchase qualifying equipment, but never applying for rebates. We estimate this to be 46,899 therms that could be added to the overall total therm savings from the Food Service EER program for program cycle 2006-08. The recommendations outlined in the following section, if implemented and successful, could enable SoCalGas to more effectively claim these savings.

Another channel for FSEC to claim credit for process changes it has influenced, may be through the existing SoCalGas Business Energy Efficiency Program (BEEP). The Process Equipment Replacement (PER) and Custom Process Improvement (CPI) program component of BEEP focuses on improvement measures related to specific industry sectors working closely with account executives. The PER and CPI programs are applicable to FSEC food service customers, since they focus on small to medium sized customers who do not have energy efficiency managers. Many FSEC equipment presentation attendees would fall under this category. Savings related to process improvements were estimated on the scale of 10,954 therms, but were based on rough estimates. Further evaluation of the potential for savings related to process improvements should be pursued.



Apart from process improvements, customer may also be improving their operations and maintenance procedures in ways that save energy. O&M changes are different from process changes in that savings are found through actions like changing filters (vent, water, and oil), changing behaviors (e.g. shut down and start up times) and cleaning processes. O&M improvements are changes in the operations of existing equipment, not related to the purchase of any new equipment. It is unlikely that FSEC will be able to claim credit for changes to O&M practices, since California Public Utilities Commission (CPUC) policy has been to only recognize savings associated with the installation of new equipment. O&M energy savings are considered indirect savings and have not yet been recognized by the CPUC for claiming savings.

1.4 Conclusion and Recommendations

KEMA's research has found that FSEC equipment presentations are highly influential in assisting customers with making decisions about food service equipment and for educating the public about energy efficient cooking equipment. The FSEC equipment presentations are also found to help chain accounts to develop specifications leading to more efficient equipment and process decisions and to educate customers about the importance of O&M best practices.

The results of this project show that FSEC equipment presentations lead to therm savings beyond what is currently being claimed under the Commercial Food Service EER program, potentially representing an additional 10% therm savings. To claim these additional savings, KEMA believes that FSEC staff should focus on the established channels for claiming rebated therm savings as these are not being fully exploited. This includes both the Commercial Food Service EER program and the Custom Process Improvement and Process Equipment Replacement programs. Efforts to claim non-rebated therm savings are not expected to easily pass CPUC scrutiny due to the complex issues of attribution and baseline determinations, and therefore, not recommended at this time.

The purpose of the following recommendations is to assist FSEC staff to more fully utilize existing channels for capturing therm savings. The recommendations are the results of our analysis and are prioritized according to both degree of effort and the potential magnitude of additional therms to be claimed.

1.4.1 Capture more savings from existing rebate qualifying purchases

Customers are found to go on to purchase rebate-qualifying equipment after seeing the equipment in action at the FSEC, but many do not submit rebate applications for their purchases. Since this is an established channel for SoCalGas to claim "credit" for customer purchases of energy efficient equipment, and FSEC presentations clearly influence purchase decisions, this is viewed as the easiest and most direct way to claim savings associated with FSEC equipment presentations.

Figure 1-1 provides a framework for documentation and follow-up with customers to best capture savings that are attributable to FSEC equipment presentations. Since customers sometimes have difficulty providing the typical documentation required by the Commercial Food Service EER program, the below flow-chart is provided to assist FSEC staff with appropriate follow-up. The flow-chart details a set of alternative documentation and post-inspection procedures to enable SoCalGas to claim the therm savings related to customer purchase of efficient equipment they viewed at the FSEC.



Figure 1-1 Framework for Alternate Documentation to Claim Savings under EER







The following recommendations highlight key points in the above decision-making flow-chart.

Recommended strategies:

- Continue to offer exemplary service to SoCalGas customers and continue to assist customers with improving energy efficiency in their facilities and submitting rebate applications.
- At the conclusion of a presentation, have visitors indicate the likelihood of purchasing equipment viewed, and then follow-up with customers who indicate a high likelihood to buy rebate-qualifying equipment.



- Carefully document and assess the extent to which FSEC has influenced customers' planned purchase decisions to reduce the potential for free-ridership.
- Identify which chain accounts have rebate-qualifying equipment on their list of eligible equipment for franchisees and work with them to distribute rebate program data and applications.

1.4.2 Increase the number of rebate qualifying purchases

The FSEC already promotes the energy efficient versions of equipment when possible, but another way to capture more therms savings is to more heavily market rebate qualifying models in the effort to further increase the number that are purchased. This represents the first two steps as shown above in Figure 1-1. By expanding the number of customers who are educated about the energy efficient models, presumably a larger number of customers may go on to purchase this equipment, leading to more therm savings.

Below are some additional recommended strategies for further highlighting the rebate qualifying equipment to customers who visit the FSEC, in the hopes that such information and emphasis will lead to additional purchases of rebate qualifying equipment.

Recommended strategies:

- Usage signage and informational tags to highlight the energy efficient equipment on the floor.
- Consider creative ways to increase the number of presentations of rebate qualifying equipment, without jeopardizing the variety and options available to customers.

1.4.3 Capture therm savings from process improvements

In cases where equipment, for which no energy efficient standard is available (e.g. conveyor ovens), there may be verifiable therms savings related to process improvements. The SoCalGas Business Energy Efficiency program already has a component to capture process improvements from small to medium businesses that work with their account executives to demonstrate savings. Since it is an established program, this would likely be the easiest way to capture savings related to process improvements that would pass CPUC scrutiny.

Recommended strategies:

 Assess one or two specific instances of process improvements and see if these savings could be captured through the BEEP "Process Equipment Replacement and Custom Process Improvement" program.

1.4.4 Restructure the rebate program to increase participation

Equipment dealers, marketing reps, manufacturers and food service designers already play a significant role in assisting customers with equipment purchases and influencing purchasing decisions. These types of vendors can be essential for both getting customers to purchase rebate qualifying equipment, and for assisting with the rebate application process themselves. Recognizing this, the Commercial Food Service EER program is offering a vendor incentive (i.e. spiff) from September 15 through December 15, 2008 of \$10-\$20 total depending on whether a paid invoice or completed rebate application is submitted.



Another issue identified as an obstacle to the rebate application process relates to chain accounts. Franchises with centralized equipment distribution/invoicing practices struggle to document where qualifying equipment has been installed. Without this information, a rebate application cannot be submitted.

Recommended strategies:

- Continue to offer incentives for vendors that work with customers who buy rebate qualifying equipment.
- Restructure rebate program to ease equipment destination requirements. One way to do this may be to create a custom channel that incorporates a post-inspection of the installation, provided the customer first viewed the equipment at the FSEC.

1.4.5 Continue to document FSEC efforts that save customer energy

The FSEC is an important player in the food service industry, helping customers to improve energy efficiency and O&M at their facilities. Although these types of activities clearly lead to customers saving therms, the opportunity to prove savings is limited under current policy guidelines. Therefore, the FSEC should continue to document these types of efforts, and show how FSEC works to transform the market.

Recommended strategies:

- Document when FSEC equipment presentations are for the purpose of helping chain accounts to develop equipment presentations.
- Include in the FSEC tracking database a field for whether the equipment is rebate qualifying and, if not, whether rebate-qualifying alternatives exist.
- Ensure that the FSEC presentation tracking database includes every equipment viewed by a customer even if it was informally presented.



2. Introduction

This report presents the results of a process evaluation of Southern California Gas Company's Food Service Equipment Center (FSEC) equipment presentation offering. This section provides a brief overview of the FSEC equipment presentations, discusses the evaluation objectives and approach, and describes the organization of the remainder of the report.

2.1 Overview of the FESC

The Food Service Equipment Center is located in Downey, California, to serve as a resource for a wide range of commercial food service entities, from restaurants to schools to food processors. It is comprised of a state-of-the-art kitchen with up to 160 pieces of equipment from as many as 50 leading manufacturers (Figure 2-1). They provide information to visitors of the facility via an assortment of printed materials, coordinating with equipment vendors and offering in-house expertise. It offers a scheduling tool and many of their energy efficiency materials via their website.

The FSEC is widely known in the industry for providing free presentations of commercial equipment, seminars and a test facility for commercial food service equipment. The free demonstrations and presentations of commercial cooking equipment bring together chefs, product development staff, equipment dealers, marketing representatives and others involved with the purchase of new cooking equipment and the development of new and revised recipes. Approximately 450 equipment presentations occur each year at the FSEC.



Figure 2-1 Test Kitchen at Food Service Equipment Center

The seminars hosted by the FSEC cover a range of topics to educate the public about energy efficient equipment selection, ventilation, food safety, equipment maintenance, and industry trends. The food service equipment testing facility is used to 1) determine whether a given model of equipment meets a pre-established threshold of efficiency to qualify for a rebate; or 2) where no threshold has been established, conduct tests to assist in the determination of appropriate thresholds by testing both currently available and soon-to-be available equipment.

The FSEC is funded under the Statewide Education, Training and Service Program. Although the FSEC, itself, claims no quantitative therm savings, it serves an important role in educating customers about



SoCalGas rebate programs and qualifying equipment options, how different cooking equipment models offer various efficiency measures, and what operational and maintenance practices lead to more efficient food preparation (Figure 2-2).

Figure 2-2

Sample FSEC Seminar Flyer **Building** Environmentally **Friendly Kitchens** A Sempra Energy utility* What does it mean to "green" a Thursday, restaurant—and who's doing it? October 2 (Seminar #18233) Come hear about the US Green Building Council's LEED® Who should attend: (Leadership in Energy and Environmental Design) program and Facility managers what it means for foodservice. See "green" products that can help Restaurant owners Designers and consultants your operation. Compostable forks, organic greens and sustainable Foodservice directors beef are excellent ideas that have opened people's minds to green and managers foodservice. In addition, behind the kitchen doors lies one of the Operators of biggest opportunities to reduce the environmental footprint of the chain accounts restaurant through energy and water conservation. Time: Reduce water usage and save 9:00 a.m. - noon (8:30 a.m. check-in and continental Learn about new water systems that save money and reduce the breakfast. Lunch provided.) need for bottles while still serving high-quality water. Learn from an expert... Cost Free Richard Young, senior engineer and director of education at PG&E's Food Service Technology Center, will present state-of-the-industry Location: knowledge about greening foodservice, including the latest updates The Gas Company's Food Service Equipment Center on USGBC's LEED program and California's Green Business 9240 Firestone Blvd. Certification programs. Richard will also serve up some real-world Doweny, CA 90241 examples of how saving energy and water can increase the bottom line. The Gas CompanySM is offering this seminar as part of our ongoing commitment to provide our business customers with exceptional service and to promote energy efficiency. d administered by Southern California Gas Company under the auspices of the ers are not obligated to purchase any product or service mentioned in led by California utility custome ities Commission. California cor California Public Utilities Co this program © 2008 Southern California Gas Company. The above trademarks belong to their respective owners. All rights reserve

Under the SoCalGas Prescriptive "Commercial Food Service Rebate" program, customers get rebates on qualified food service and commercial equipment. This is the main channel by which SoCalGas gets "credit" for the therm savings associated with energy efficient cooking equipment within its service



territory. However, it is believed that customers who attend FSEC equipment presentations are influenced by their visit to purchase higher efficiency equipment and, yet, do not always go on to apply for a rebate for this equipment. Furthermore, anecdotal evidence collected by FSEC staff implies that, as a result of their visit to the FSEC, customers are also changing their cooking processes in ways that save energy.

2.2 Evaluation Objectives and Approach

The study objective was to evaluate the extent to which FSEC equipment presentations are leading to therm savings that are not being captured by the "Commercial Food Service Rebate" program, and provide recommendations on how to potentially quantify and attribute these savings to the FSEC. The approach was to conduct in-depth interviews with three types of FSEC stakeholders:

- **Customers who attended FSEC presentations AND went on to apply for a rebate** related to purchased food service equipment. Sixteen unique businesses were identified to belong in this category.
- **Customers who attended FSEC presentations.** No further information was available about their actions following their visit to the FSEC. Approximately 300 businesses were recorded as attending at least one presentation between January 2006 and March 2008.
- **Vendors** who interact with food service customers and are knowledgeable about the FSEC equipment presentations. A range of vendor types was identified, including marketing representatives, equipment dealers, food service designers/consultants and manufacturers.

In addition to in-depth interviews, KEMA analyzed the FSEC equipment presentation tracking database, the rebate program data and other food service information. The overall goal of this combined research was to:

- Determine the influence of the FSEC presentation events on purchase decisions that were rebated through the Food Service Efficient Equipment Rebate (EER) Program;
- Assess the relative influence of the presentation event and the rebate on customer as well as the vendor.
- Determine the extent to which customers have installed energy efficient equipment outside of SoCalGas rebate programs and/or made other types of changes that might affect energy use (e.g., behavioral/process improvements, O&M improvements, etc.);
- Identify reasons why some customers participate in rebate programs and others do not.
- Assess the extent to which their experience with SoCalGas and the FSEC presentation events has led to design changes that become company-wide specification requirements.
- Gather information to produce energy savings estimates for these projects, including details on baseline as well as installed equipment;
- Provide recommendations for capturing the energy savings benefits of these types of projects in the future.



2.3 Report Structure

The remainder of this report outlines the types of equipment presented at the FSEC, interview results and analysis of potential therm savings attributable to the FSEC equipment presentations outside of the "Commercial Food Service Rebate" program. Case studies on the purchasing process and use of the FSEC by three different customer types are also included. Finally, recommendations are provided regarding some steps the FSEC can consider to improve the accountability of the purchasing, process evolution and operational practices that lead to energy savings for SoCalGas.



3. Types of Equipment Presented at FSEC

For the purposes of this project, KEMA reviewed both the tracking data for the FSEC equipment presentations and for the "Commercial Food Service Rebate" program. The tracking data provided includes the rebated applications and FSEC visits/presentations during 2006, 2007 and Q1 2008. In general, much more specific information related to the equipment presentations, including manufacturer and model numbers, were available in the FSEC visits/presentations data compared with the rebate program tracking data.

Since many customers come to the FSEC to view several pieces of equipment at once, across several different days, often with different staff members, the following terms are used to describe customer interactions with the FSEC.

- **Customer visit** refers to any instance a customer comes to the FSEC to view equipment, whether they see one piece or several pieces of equipment and regardless of the number of customer representatives attending. Each visit is recorded by the date of the visit. A single customer may record several visits during the program cycle.
- **Equipment presentation** refers to each individual piece of equipment that was viewed during a customer's visit. A customer may view several equipment presentations during one visit.

3.1 Equipment Presentations and Rebate Applications

Over the past couple of years, FSEC equipment presentations have drawn more unique visitors than the rebate program. In other words, many of the rebate applications are submitted by "repeat" participants. Figure 3-1 shows the relative size of the FSEC presentations compared with the SoCalGas Commercial Food Service Program, and the level of overlap between participants. More than 10 percent of rebate program applications had attended an equipment presentation at the FSEC. In contrast, only about 5 percent of FSEC equipment presentation attendees had gone on to apply for a rebate. The overlap area accounts for about 15% of all unique rebate applicants and, at 66,570 therms, accounts for about 14% of all claimed savings for food service equipment.



Figure 3-1 Diagram of the Overlap in Participants¹



Upon closer inspection of the data regarding rebate applications for the same time span, the distribution of applications for various measures was found to be as shown in both Table 3-1 and Figure 3-2 below.

Commercial Measure	No. of Units Rebated ²	Percent of Total Rebates	Associated Therms	Percent of Total Therms Saved
Combination Oven	140	14%	56,420	12%
Convection Oven	378	38%	122,094	26%
Fryer	399	40%	201,495	44%
Fryer, Large Vat	21	2%	12,138	3%
Griddle	28	3%	2,464	1%
Pressureless Steamer	6	1%	12,504	3%
Rack Oven, Double	25	3%	52.600	11%
Rack Oven, Single	1	<1%	1,034	<1%
Totals	998		460,749	

 Table 3-1

 Distribution of Measures and Associated Savings across EER Applications

¹ Rebate program unique participant data from 2006 through Q1 2008.

² Rebate program tracking database from 2006 through Q1 2008.





Figure 3-2 Distribution of Therm Savings for Food Service Equipment

Fryers are the most popular category for rebate applications, followed closely by convection ovens and then distantly by both combination and double rack ovens. That high-efficiency fryers have garnered the most rebate applications is not surprising given that high efficiency fryers have several co-benefits, aside from energy efficiency. An efficient fryer provides better quality food product because of shorter temperature recovery and food preparation times. The automatic filtration systems more typically found in efficient fryers prolong the useful life of frying oil. Since cooking oil prices are on the rise, high efficiency fryers are seen as an increasingly "easy sell."

The distribution of FSEC presentations for food service equipment types was found to be as shown in Table 3-2 and Figure 3-3. These graphics show only those presentations pertaining to equipment for which rebate qualification standards are in effect. Presentations regarding equipment without any rebate qualifications were not included in this analysis (e.g. braising pans, deck ovens, etc).



Table 3-2
Distribution of FSEC Presentations Regarding Equipment with Rebate Options

Commercial Measures with Rebate Qualifying Options	Number of FSEC Presentations	Number for Qualified Models	% Presentations for Qualified Models
Combination Oven	205	141	69%
Convection Oven	170	93	55%
Fryer	108	58	54%
Fryer, Large Vat	0	0	0%
Griddle	69	54	78%
Pressureless Steamer	36	8	22%
Rack Oven, Double	0	0	0%
Rack Oven, Single	22	1	5%
Sub-Total of Presentations re Equipment with Rebate Qualifications	610	355	58%
Sub-Total of Presentations re Equipment without Rebate Qualifications	421	0	0%
Total of All FSEC Presentations	1031	355	34%

Figure 3-3 Distribution of Presentations to FSEC, Both Qualifying and Non-Qualifying





For most equipment categories with rebate qualifying equipment options, at least half of the FSEC presentations pertain to the rebate-qualifying models. For example, equipment presentations of combination (combi) ovens, convection ovens, fryers, and griddles were mostly for the rebate qualifying models. However, for certain equipment categories, including rack ovens and steamers, the majority of equipment viewed was non-rebate qualifying models despite the fact that qualifying alternatives exist.

Although a rather small overlap was found between rebate applicants and FSEC visitors, it is illustrative to view the claimed savings, from Table 3-1, relative to the FSEC presentations, from Table 3-2, side by side, as shown in the below Table 3-3.

Equipment with Rebates	% of Claimed Savings, Therms	% of FSEC Presentations	Deemed Savings per Unit, therms
Combination Oven	12%	34%	403
Convection Oven	26%	28%	323
Fryer (Sm. & Lg. Vat)	47%	18%	505 & 578
Griddle	1%	11%	88
Pressureless Steamer	3%	6%	2,084
Rack Oven (Single & Double)	11%	4%	1,034 & 2,104

 Table 3-3

 Comparison of Rebate Applications to FSEC Presentations

Of particular note is that, while combination ovens are quite costly, they account for a large portion of the FSEC presentations. This is thought to be due to the fact that combination ovens offer a wide range of capabilities in a single piece of equipment that might steam, poach, roast, broil, bake and re-thermalize. While combination ovens save space by reducing the number of individual pieces of equipment needed, other qualities, such as functionality and control options, are sometimes compromised. Furthermore, the operation of a combination oven is more complicated compared with other types of equipment; this leads to more on-site visits for customers to try it out and help train employees. Although there is a high level of interest in viewing this type of equipment, the upfront cost appears to be prohibitive to many small businesses. Furthermore, the rebate of \$750 for a combi oven relatively small compared to the upfront cost, which can be about \$25,000.

Although fryers do not have one of the higher rates of deemed savings per unit, the sheer number of rebate applications gave them 47% of the claimed savings for all food service equipment. On the other end of the spectrum, those types of equipment with the highest rates of deemed savings per unit, the pressureless steamers and the rack ovens, yielded only 14%, combined, of the claimed savings for all food service equipment.

KEMA analyzed the trends for various types of qualifying equipment, from 2006 through Q1 2008, to learn whether any equipment types emerged as on the rise. Figure 3-4 shows the smoothed trendlines found for the monthly rates of rebate applications and the monthly rates of FSEC visits for each major category of qualifying food service equipment.





Figure 3-4 Estimated Monthly Trends of Rebate Applications and FSEC Visits

Monthly rates of rebate applications and FSEC visits remained fairly steady for three types of equipment: griddles, pressureless steamers and rack ovens. On the other hand, the rate of rebate applications for combination ovens, convection ovens and fryer rebates stand out and are increasing rapidly. The rate of FSEC visits pertaining to combination ovens and convection ovens appears to be on a slight decline, however. These observations may be useful as the FSEC looks to increase the claimed therm savings in the coming years.



4. Interview results

KEMA contacted the following three types of Food Service Equipment Center stakeholders: customers who had attended a presentation at the FSEC, customers who both attended a presentation and subsequently applied for a rebate for a purchased piece of equipment, and vendors. In all of these interviews, our underlying objectives were to evaluate the extent to which FSEC presentations led to:

- Rebated purchases of qualifying equipment;
- Non-rebated purchases of qualifying equipment;
- Changes to Operation & Maintenance (O&M) practices for food service equipment;
- Changes to company-wide design specifications.

The following sections provide a summary of customer and vendor feedback on their experience interacting with the FSEC.

4.1 Customer Interview Results

The term "customer" applies to the individuals that attended the demonstrations on behalf of companies that are interested in purchasing food preparation equipment for their place of business. Customers play varying roles in their companies like executive chef, purchasing manager, owner, kitchen designers and consultants, and more. The companies they represent encompass a wide variety of business niches and scales ranging from independently operated bakeries and pizzerias to amusement park restaurants and fast food chains. Therefore, each customer is unique and schedules demonstrations for specific pieces of equipment to suit their particular needs. Despite the inherent differences between the customers, we focused on four key areas in our interviews:

- 1. Use of FSEC and primary equipment considerations
- 2. Rebate awareness and process
- 3. Influence of FSEC visits and rebates on purchasing decisions
- 4. Changes in maintenance and operational practices after FSEC visits

Table 4-1 shows the number of completed interviews for this project, compared with the population available. Over 300 unique visitors had attended a presentation at the FSEC, of which 16 had gone on to apply for a rebate for purchased equipment. Of the 290 unique visitors who did not apply for a rebate, there are several chain restaurants such as Applebee's, Island's Restaurants, Gelson's Markets, and Del Taco, but the remainder are mostly individual businesses with only one or two locations with SoCalGas' territory.



Type of customer	Total number of customers in sample	Number interviewed
Attended a presentation only	~290	21
Attended a presentation and subsequently submitted a rebate application	16	7

Table 4-1Summary of Customer Interviews

The tracking database lists each equipment presented, the date and the customer name. On average, each unique customer saw about 3.2 different pieces of equipment between January 2006 and March 2008.

4.1.1 Use of FSEC and Primary Equipment Considerations

In this section, we provide a breakdown of customer responses to our survey questions that focused on their use of the FSEC and what their primary considerations are when making purchase decisions.

In Figure 4-1, customer responses are presented showing how often they choose to use the FSEC when they need to make an equipment purchase. From the 24 responses we received, a majority (15) say they use the FSEC 75% or more of the time to see equipment before they make a purchase.



Figure 4-1





Similarly, when customers were asked how likely they were to make purchases without requesting a presentation, a majority (56%) confirmed that this was either not, or not at all, likely. These results are summarized in the below Figure 4-2.

Figure 4-2 F4: Using a scale of 1-5, how likely are you to make equipment purchases without requesting a demonstration at FSEC? (n = 25)





When customers come into the FSEC to view equipment, it is important to understand the features of the equipment that they are most concerned about. Figure 4-3 and Figure 4-4 show that the quality of food is the number one concern of end use customers, although speed of food preparation, size and first cost are also important considerations.

Quality of food preparation	Speed of food preparation	Size of equip.	Affordable first costs	Energy Efficiency	Manageable Maintenance	Noise	Other	Other. Specify
18	15	12	12	10	8	2	4	Consistency Heat coming off of unit Food volume produced Whether it can bake a chiffon cake

Figure 4-3 B5: Major Equipment Considerations during FSEC Demonstrations? (n = 81)





Figure 4-4 B5a: Of the considerations you mentioned, which one(s) are the most important to your company? (n = 29)

Quality of food preparation	Speed of food preparation	Energy Efficiency	Size of equip.		ordable st costs	Manageab Maintenan	Other	Other. Specify
13	4	4	3	2		1	2	Food volume produced Can it bake a chiffon cake
Quality of f	ood preparation							44.9%
Speed of f	ood preparation	-		13.8%				
Er	nergy Efficiency			13.8%				
	Size of equip.		10.3	%				
Afford	able first costs		6.9%					

Some of the "other" considerations that customers mentioned that were important to their business including: whether or not the oven could bake a chiffon cake, the amount of heat coming off of the unit (placement issues), the volume of food it could produce in a given amount of time, and the consistency of the product being baked.

6

8

10

12

14

4

6.9%

3.4%

2

Other

0

Quality of food preparation



4.1.2 Rebate Awareness and Process

In this section, we provide the results of interview questions focused on the rebate program to better understand customers' awareness of available rebates and the ease of the application process. A majority of customers who attended a demonstration do not recall being handed a rebate application during their visit to the FSEC (Figure 4-5). Although many of the customers interviewed did not view a rebate-qualifying piece of equipment, distribution of rebate applications can be an important step to ensuring that customers have the necessary paperwork should they decide to purchase a qualifying equipment, as well as educating customers about the types of equipment that qualify.

Figure 4-5 F3: For approximately what percentage of your FSEC visits were you handed a rebate application? (n = 25)

0%	14
5%	2
10%	1
100%	8





For the most part, customers who viewed a less efficient piece of equipment for which the equipment category had efficient models (such as convection ovens, fryers, combination ovens, etc.) knew that rebates were available for other more energy efficient models. Figure 4-6 shows that 66% of customers who viewed a less efficient model were aware of rebate-qualifying alternatives in the same category of equipment, with 34% of customers saying they didn't know, or were unsure.

Figure 4-6 B4: Non Rebate Qualifying Demos: Were You Aware that Other Equipment in Category Qualified for Rebate? (If Applicable) (n = 8)





Some of the customers we spoke to indicated that they were aware that rebates were available for more efficient models, but needed to view specific equipment because of sizing restraints or the volume of food that needed to be produced in a short amount of time. Most of the customers learned about the rebate-qualifying alternatives from an FSEC employee (Figure 4-7).







For customers who applied for a rebate for the equipment they purchased as a result of visiting the FSEC, most received assistance from SoCalGas staff to fill out the application form. Account executives and FSEC staff play a prominent role in assisting customers with the rebate application form, as shown in Figure 4-8.

Self	Other SCG Rep	FSEC	Maintenance Engineer
5	4	3	1

Figure 4-8 C1: Who filled out the rebate application? (Sample = 13)



Of the five customers who filled out the application themselves, one said it was difficult to get the BTU ratings, but the other 4 said they had no difficulties whatsoever.



Customers were asked whether they planned to purchase additional equipment in the coming year. Four out of eleven respondents indicated that they planned to purchase equipment this year and would only consider rebate-qualifying equipment, while the majority (7) indicated that rebates were not the primary consideration in their equipment purchases (Figure 4-9). A resounding a number of customers reported that if they were to purchase rebate-qualifying equipment that they would "very likely" apply for the rebate. A few of them indicated that they would not because the rebates were small compared to their revenue streams associated with the products and the "opportunity costs" of dealing with the application (Figure 4-10).

Figure 4-9 E2e: For customers that anticipate making a purchase in the coming year: On a scale of 1-5, how likely are you to consider only rebate-qualifying equipment models? (n = 11)





Figure 4-10

E2f: For customers that anticipate making a purchase in the coming year: On a scale of 1-5, how likely are you to apply for a rebate upon purchasing qualified equipment? (n = 11)

1	Not at all Likely	Not Likely	Somewhat Likely	Likely	Very Likely
	2	0	0	0	9




4.1.3 Influence of FSEC Visits and Rebates on Purchasing Decisions

In this section we examine the influence that the FSEC had on customer purchase decision and rebate application rate. When customers were asked how certain they were before the presentation that they would purchase the equipment they went in to see, the average response was 2.2 out of 5.0, where 5.0 was very certain. Customers also rated the influence of the presentations a 4.6 out of 5.0 (where 5.0 is very influential) when asked how influential their visit was to their decision to purchase (or not to purchase).

Customers consistently expressed they would have purchased alternate pieces of equipment if they had been unable to participate in the presentation at the FSEC. Of the customers we interviewed that did apply for rebates after a demonstration (3 total), there were mixed results; two saying they would "likely" and "very likely" have applied for a rebate even if they hadn't been to the center for a demo and one customer that it would have been "very unlikely."

Customers find significant value in seeing equipment presented at the FSEC. Figure 4-11 shows that the majority of customers are likely to view equipment at the FSEC before making a decision.

Figure 4-11 E2d: For customers that anticipate making a purchase in the coming year: On a scale of 1-5, how likely are you to view this equipment at the FSEC to help you make your decision? (Sample = 11)





4.1.4 Changes in Operations, Maintenance, and Process after FSEC Visits

In this section we focus on changes that customers have made in their operational and maintenance practices as well as highlight some process changes that customers pointed out as a result of visiting the FSEC. Approximately 46 percent of customers indicate they have made changes to their operational practices as a result of visiting the FSEC (see Figure 4-12).





In a follow-up question customers provided the following examples of how they had changed their operational practices. A number of customers also indicated process changes as a response to this question. The below responses provide some insight into the types of things customers did after visiting the center.

- Posted food temperature posters that were provided in business location.
- The size of the equipment and specifications helped determine the layout of the kitchens.
- Don't leave ovens on overnight anymore.
- Ability to do placement and process management.
- Time motion studies at center.
- Steam everything now in the steamer, as opposed to using pots of boiling water.
- Changed the filters on ventilation hood.
- Learned that the clamshell didn't really add to the value of the equipment.

Approximately 36 percent of customers indicated that they had made changes to the maintenance regimes as a result of visiting the FSEC (Figure 4-13).







In a follow-up question customers provided the following examples of how they had changed their maintenance regimes as a result of visiting the FSEC:

- Regularly scheduled maintenance check-ups and keeping equipment cleaner.
- Sent employees to seminars, where they learned how to take care of new equipment.
- Developed a maintenance regime for Johnny Rockets over multiple visits to the center where they
 tested the aging of oil in equipment runs.
- Implemented a new filtration system.
- How to keep the temperature on their equipment at the optimal level; properly clean equipment; make sure that there isn't an over surge of power going to their equipment.

4.2 Vendor Interview Results

The term "vendor" is used loosely to refer to the various market actors that assist and sell cooking equipment to end use food service customers. Four main types of upstream market actors were interviewed:

- **Marketing representatives** generally represent several manufacturers and brands of cooking equipment. They perform a sales and marketing role for specific types of food service equipment and participate in Food Service Equipment Center presentations to show customers the equipment they represent.
- **Food service dealers** actually sell customers the equipment. When customers ask about different equipment, dealers often refer them to the marketing representative for the appropriate brand/type of equipment.



- **Food service designers** serve as consultants who assist with kitchen layout and design of restaurants. Designers bring construction and operational knowledge to assist with both the front and back of the house (dining area and kitchen areas). These designers can also assist with the selection and purchase of equipment.
- **Manufacturers** design and build the equipment to be sold, and can respond to customer specifications for equipment, especially from large chain accounts.

Table 4-2 shows that a total of 10 interviews were completed across a range of "vendor" types. Five vendors were listed in the FSEC presentation tracking data as the end use customer, and initially contacted regarding their visit to the FSEC, rather than as a vendor. The other five vendors were contacted specifically with upstream market actor questions.

Type of vendor	Number interviewed
Marketing representative	4
Food service designer/consultant	3
Equipment dealers	2
Equipment manufacturer	1

Table 4-2Summary of Vendor Interviews

4.2.1 Reasons for attending a presentation

Across five vendors who were contacted about their role as an upstream market actor, about 35% of their customers attend an equipment presentation during their decision making process. For marketing representatives, generally a higher percentage of their customers are known to have attended an FSEC presentation (as shown in Figure 4-14 below). Equipment dealers may cite a lower percentage, as their role is mostly to facilitate the purchasing while marketing reps play a larger role in assisting customers to select equipment.



Figure 4-14. Average Percent of Vendors' Customers Who Attend an FSEC Presentation (n = 9)



The FSEC equipment presentations provide an opportunity for the customer to try out the different brands/types to help them to make a decision. The vendors indicate that they bring customers into the Center to show them equipment that they may not be familiar with, such as new technology, different models and types of equipment, and for side-by-side comparisons between different manufacturers.

Food service designers may bring customers in for an equipment presentation when they wish to show the customer an equipment type the designer is proposing for the kitchen but the customer may not be comfortable with.

Marketing representatives mention that they work with the end use customers and the equipment dealers. A dealer may tell them a customer is looking at different equipment, but is unsure of what to purchase. One marketing rep says that he always suggests the customer goes down to the FSEC to test his equipment against his competitors.

Vendors corroborate the customer interviews by saying that customers may know they want a certain general type of equipment, but they may not be sure exactly what specific type. For example, one equipment dealer had a high-end steak house that was interested in a new broiler. The dealer brought the customer in to FSEC to try cooking steaks on different broilers, such as an overfired broiler. The customer "fell in love" with a Montague broiler and ended up purchasing it.

The FSEC provides an important location for testing and trying out new equipment and processes. The overarching response from vendors is that the opportunity to touch and feel the equipment in a neutral setting is invaluable.



4.2.2 Beneficial aspects of FSEC equipment presentations

Vendors indicate a wide range of benefits to attending an equipment presentation at the Food Service Equipment Center.

Characteristics of the Center

 Vendors mention that the FSEC is centrally located and accessible to a wide-range of customer types. Survey respondents also mentioned the "incredibly warm, competent hosting" by FSEC staff to facilitate the presentations. Staff were repeatedly complimented for making customers feel comfortable and for being very knowledgeable about food service equipment and the industry at-large.

Ability to touch and feel equipment

- Vendors say that the opportunity to test different equipment is incomparable. For the market actors, this eliminates headaches down the road, such as when an end user might come back and say "this doesn't work." Because customers can actually touch and feel the equipment, it reduces the second thoughts after purchasing. The equipment presentations also provide education to customers regarding what they're intending to buy.
- The hands-on experience enables customers to bring their own food product and prepare it before purchasing the equipment. The customers can actually taste the different flavor profiles while testing equipment. The vendors say that customers also get an education on energy savings and ways to make their businesses more profitable, by having more efficient equipment.

Variety of equipment

Several vendors mentioned the variety of equipment as a key benefit of the FSEC equipment
presentations. One food service designer said they had their own test kitchens, for specific
manufacturers, but SoCalGas has a larger "plethora of equipment."

Training opportunity for vendors and their employees

• In addition to the benefit for the end use customer, vendors indicate that the FSEC and equipment presentations also offer a training opportunity for their own employees. One food service designer mentioned that the visits highlight the energy benefits of certain equipment and that with the development of LEED³ for food service customers, this is becoming more and more important.

4.2.3 Perspectives on rebate program

Of the vendors interviewed, the marketing representatives were the most knowledgeable about the SoCalGas rebate program for food service equipment. All vendors were aware that rebates were available for select equipment. One food service dealer, however, had a bad experience where he thought that a rebate would be available, but the program ran out of funds. Since this experience, he no longer promotes the rebate program to his customers.

Most vendors interviewed were not aware of whether their customers got rebates for the equipment they purchased. This is mostly because marketing reps do not handle sales of the equipment lines. The one equipment dealer interviewed who does handle sales, was the one with the bad experience and no longer

³ U.S. Green Building Council, Leadership in Energy and Design (LEED) for green building standard.



promotes the program. Generally, the vendors say they refer their customers to SoCalGas for questions related to the rebate program. One marketing rep said that all members of their rep group carry rebate forms, but he's not aware how often they hand them out.

One food service designer said he was in the process of putting together a program where he processes the paperwork for customers and hands the customer a check at the end. He is currently working to set this up, but needs people in his company in place to help the process. Another equipment dealer recommends that the rebate program focus on allowing dealers to do the rebates for the customers and receive a portion of the rebate dollars for "administrative expenses."

One equipment dealer provided a suggestion on how to make the rebate process simpler: vendors should be given incentives and empowered to streamline the process for their customers; essentially requiring the customer to do nothing. The dealer suggested that this could be done by giving the vendor a small incentive relative to the equipment rebate amount for seeing the customer through the process. The dealer pointed to the example of Southern California Edison implementing a program like this.

When asked how they typically get information about the Gas Company's rebate program for EE equipment, vendors primarily cite SoCalGas emails and mailings, followed by their visits to FSEC and through the manufacturers and sales reps.

In general, vendors rate the importance of a rebate a 3 out of 5 (with 5 being very important). One food service designer said that it may be an incentive to purchase equipment sooner, but not a deciding factor. Other vendors indicate that some customer need to go to a piece that is not rebate qualifying. They may need a less efficient version, for example one with more BTUs that can handle a full oven cavity of lasagna, with a quicker recovery time. Because the rebates are not that large, and not applicable in all situations, vendors appear to have minimal motivation or incentive to heavily promote rebates to their customers. Combined with the uncertainty of fund availability, vendors are not seeing a lot of benefit to their business in promoting rebates.

4.2.4 Perspectives on O&M and process changes

Four out of the five vendors interviewed indicated that they were aware of customers changing operations & maintenance procedures and process changes that improve energy efficiency in their facilities.

Examples of O&M and process changes following FSEC equipment presentations:

- A chain restaurant previously had no maintenance programs, and they've stepped up their commitment immensely. Now, they actually have a preventative maintenance program in place. They report that this is mostly a result of their attending seminars at the FSEC.
- A school district attended a seminar and learned that they needed to replace the filters, service make-up air equipment, and make sure belts are tightened. Staff also learned that they can have the cooking equipment serviced by SoCalGas. They have gained an awareness of the importance of performing preventative maintenance on food service equipment.

When asked about O&M changes, several vendors also cited process changes at customer sites as a result of purchasing new equipment.



- One customer had been cooking large quantities on a range. He came down to test a braiser pan, and decided to purchase one. It helped his business because it made the quality of the food more consistent and sped up the food processing time, as well.
- A pie focused restaurant ended up going to revolving rack ovens.
- Other restaurants have changed brands or pieces of equipment. One, for example, moved to a combination oven.
- One client was taken by a food service designer to test broilers at the FSEC. He had come in with one type in mind and ended up buying a different type of equipment altogether.

4.2.5 Perspectives on customer interest in energy efficiency

In general, vendors estimate that about 25 percent of customers seem genuinely interested in the energy efficiency of equipment they are looking at purchasing. Most say that more and more customers are concerned about energy efficiency and, that as recently as 10 years ago, no customers used to ask about energy efficiency. Vendors recognize that the public is more aware about environmental issues. One marketing representative said that for big chain restaurants, energy efficiency is the second most important issue to these customers. Independently operated restaurants are still mostly concerned about upfront cost. However, some are asking about life cycle cost and how efficient a piece of equipment may be over a 10 year span. Overall, end use customers remain primarily concerned about whether a piece of equipment will "work for them," in terms of space, recovery time, food quality and consistency. Some customers are aware of the effect of HVAC costs of cooking equipment, and ask about that as well.



5. Savings potential

The purpose of this project is to explore the influence of the FSEC equipment presentations in leading to therm savings through customer purchases of efficient equipment, changes in cooking processes and implementation of O&M procedures that save energy. In this chapter, we will explore the magnitude of savings potential that could be potentially attributed to FSEC and related issues or methodology to enable the attribution of savings to FSEC.

There are four main areas for savings attribution:

- **Purchased equipment** for which customers saw at FSEC and went on to buy, without submitting a rebate application. Although the customer purchased the equipment without a rebate, it is arguable that the purchase is not a free-rider due to the influence of the FSEC equipment presentation.
- **Corporate equipment specifications** that chain accounts developed, in partnership with FSEC staff and as a result of using equipment presentations as a laboratory for menu and equipment specification development.
- **Process changes** as a result of equipment purchased that replaces different equipment and precipitates and change in cooking method that saves energy.
- **O&M changes** as a result of FSEC equipment presentations that showed customers how to better operate and maintain the equipment in their kitchen, and which may result in therm savings.

Based on the interview results and the tracking data, this section will seek to quantify to the extent possible the magnitude of savings potential, and any potential methodology for attributing these savings to the FSEC.

5.1 Potential Savings from Purchased Equipment

The results of the in-depth interviews with customer (and vendors) confirm that FSEC equipment presentations play an important role in their purchasing decisions. When customers were asked how certain they were that they would purchase the equipment they went in to see, the average response was 2.2 out of 5.0, where 5.0 was very certain. Customers also rated the influence of the presentations a 4.6 out of 5.0 (where 5.0 is very influential) when asked how influential their visit was to their decision to purchase (or not to purchase).

Clearly, the FSEC equipment presentations are influencing end use customers in the decision to purchase equipment (or not to purchase) the equipment they saw and tested. Furthermore, the results of the in-depth interviews showed that 3 of the 21 businesses had purchased a rebate qualifying piece of equipment without applying for a rebate. Therefore, the purpose of this section is to evaluate the potential therm savings related to energy efficient equipment purchased without a rebate, for which the FSEC influenced the original purchase decision.

5.1.1 Methodology for Estimating Potential Savings from Purchased Equipment

The general methodology for estimating the potential therm savings attributable to FSEC equipment presentations, but currently not captured by the rebate program, is based on a series of assumptions based on the data available. Figure 5-1 shows the approach for estimating the potential savings.



Figure 5-1 Methodology for Estimating Savings from Equipment



Total Number of Rebate Qualifying Equipment Shown

While the majority of equipment presented at the FSEC does not qualify as "energy efficient" (as defined by the rebate program), approximately one-third of FSEC equipment presentations are for energy efficient models. Table 5-1 shows a total of 1031 presentations from January 2006 through March 2008, and the breakdown of presentations between rebate qualifying and non-rebate qualifying equipment.

 Table 5-1

 Number of FSEC Presentations of Energy Efficient Equipment

	Number of presentations	Percent of total
Rebate qualifying	355	34%
Non-rebate qualifying (but in a qualifying equipment category)	255	25%
Non-rebate qualifying (in category with no efficiency standard)	421	41%

Although the majority of equipment presented at FSEC does not qualify for a rebate, the fact that 34% of presentations are for energy efficient versions is still believed to have achieved savings above and beyond the existing market penetration of energy efficient food service. Vendors interviewed indicated that rebate-qualifying equipment remains a small fraction of the food service equipment market, and well below the 34% mark. By totaling the presentations of rebate qualifying equipment, and multiplying by the deemed savings values, an upper boundary can be established for what the maximum therm savings could be if all the presentations led to customers purchasing 1 unit of that equipment. Table 5-2 shows that at most, SoCalGas could theoretically be responsible for 137,939 therms saved if all customers purchased what they saw.



	Therms/yr per unit⁴	Number of presentations	Therms/yr potential savings
Fryer	505	58	29,290
Griddle	88	54	4,752
Steamer - Pressureless	2084	8	16,672
Oven - Convection	323	93	30,039
Oven - Combi	403	141	56,823
Oven - Rack (assumed)	363	1	363
		355	137,939

 Table 5-2

 Deemed Savings Related to Equipment Presentations

Estimated Number of Units Purchased

The in-depth interviews with 28 customers covered 88 pieces of equipment presented, of which customers said they purchased 15. Based on this data, it is estimated that 17% of equipment presentations⁵ lead to a customer purchase.

The analysis of the rebate program tracking database shows that on average, each unique customer purchased 4 pieces of equipment.

Estimated Number of Units Purchased Without a Rebate

Based on the results of interviews with 28 customers, 6 had purchased a rebate qualifying type of equipment and 3 of those customers applied for a rebate. Therefore, it is estimated that approximately half of end-use customers who visited the FSEC and purchased rebate qualifying equipment did not get a rebate. This is the population for which FSEC can demonstrate they influenced, but SoCalGas can not currently claim savings for, because the customers were not counted in the rebate program.

Results

Using the methodology illustrated above, the results of the research imply that approximately 46,728 therm savings may be attributed to FSEC equipment presentations to customers who did not participate in the rebate program. Figure 5-2 shows the assumptions used in the calculation.

⁴ Source: PG&E Food Service Equipment Workpapers (October 2005)

⁵ Equipment presentations are defined as separate equipment shown to a customer. This is in contrast to a FSEC visit, in which a customer might see several different equipment presented.



Figure 5-2 Back of the Envelope Savings Estimate



In comparison, the total therm savings of the EER Food Service program rebated through Q1 2008, is 460,749 therms. Therefore, the additional savings attributable to FSEC is estimated to be approximately 10% more for the program.

5.2 Potential Savings from Corporate Equipment Specifications

Customers use the FSEC as a neutral location to learn about cooking equipment. Chain accounts, in particular, use the FSEC as a "laboratory" for testing equipment and developing corporate purchasing specifications for cooking equipment. The restaurant chains interviewed indicated that FSEC equipment presentations influence the types and model of equipment that is included in their list of acceptable equipment.

5.2.1 Chain account interviews

The below chain accounts were interviewed because they had both attended an FSEC equipment presentation and applied for rebates over the 2006-2008 funding cycle.

Chain Account 1

The staff uses the FSEC to test different equipment that may be included in their corporate equipment specifications. They collect several data points in their testing process, including cooking times, temperatures, yield, quality of final product, setting up time, and other metrics. A representative from their R&D Construction and Facilities mentioned that they also work closely with the manufacturers to work out lifecycle costs and other equipment characteristics.

The rebate program tracking database shows that this chain account's corporate office applied for rebates for 10 combination ovens and 8 fryers. In speaking with the corporate contact for those rebates, she confirmed that it was for company operated restaurants only. In the rebate program tracking database, only one franchisee had applied for a rebate (for 2 fryers). This is striking because almost 60% of this chain restaurants are franchises,⁶ who must select cooking equipment from a list of approved options provided by corporate. Clearly, franchise owners are applying for rebates for qualifying equipment at much lower rates than the corporate owned restaurants, although KEMA believes that several rebate-qualifying equipment is listed on the eligible equipment list for franchisees.

 $^{^{6}\} http://www.thefranchisemall.com/franchises/details/11100-0-El_Pollo_Loco.htm$



Chain Account 2

This is another chain account that shows several visits to the FSEC in 2007. Both corporate representatives and one franchisee have come into the FSEC to view equipment. The FSEC tracking database shows the Vice President of Operations visiting two separate times to see the Eloma combination oven T-6-11G and two different types of Montague broilers. The franchisee who came in to the FSEC indicated that he wasn't sure which type of combination oven to purchase, so he came to view both the Eloma combination oven and the Rational combination oven. Both types of combination ovens were listed on the chain account's recommended equipment list. The franchise owner decided to purchase the Rational combination oven, but since he could not remember the model name, KEMA could not verify if it was rebate-qualifying. He did not apply for a rebate.

Another franchise owner had also applied for a rebate, and he mentioned that he had selected it from a list provided by the corporate office. He was actually notified by a Gas Company Service Technician that the equipment was rebate qualifying. He couldn't recall whether the equipment dealer or Gas Company representative provided him with the actual rebate application.

Chain Account 3

This chain indicated they were such a large purchaser, that they have the leverage to work directly with the manufacturers to have custom equipment made. The interviewee indicated that the manufacturer starts with a rebate qualifying model and then customizes it to make it more efficient for them.

Once the custom equipment is produced they conduct a test at the FSEC to make sure it meets the specifications and quality conformities required. The interviewee said that they rely on the expertise of the FSEC staff to make sure that it conforms to the energy specifications.

They also rely heavily on their account executives to process the rebate applications and says that the FSEC is "essential" to equipment selection. They "provide the environment that makes this possible." They already have the equipment picked out/customized before the go to the Center, but then use the FSEC to get the Gas Company's opinion on the units.

Although this chain has no plans to begin franchising their restaurants, it is clear that the FSEC equipment presentations have a large influence on their corporate specification process and approach to designing and purchasing new equipment for their restaurants. This chain account applied for rebates totaling 60 fryers across 12 locations.

5.2.2 Results of analysis

The FSEC equipment presentations play an important role in corporate equipment specification development. These specifications manifest themselves across two types of restaurants, company owned and franchise owned chain restaurants. The following two observations are made:

• Chain accounts are specifying rebate qualifying equipment to their franchisees, based on the FSEC equipment presentations. But few franchise owners are applying for rebates associated with these purchases. No franchise owners indicate that they heard about the rebate program through their corporate contacts.



 Chain accounts are specifying rebate qualifying equipment for their own company owned restaurants. In these cases, the corporate accounts are generally pursuing rebates for their purchases.

No estimated savings value is provided related to these chain account corporate specifications, because of the lack of information related on which rebate qualifying equipment is currently included in the approved corporate equipment list. However, it is clear that FSEC equipment presentations provide an important venue for chain accounts to develop equipment specifications, and these chain accounts rely on the knowledge and expertise of FSEC staff to assist them in specifying energy efficient equipment.

In summary, there is an opportunity for the corporate chain restaurants and SoCalGas to communicate to franchisees when rebates are available for certain equipment on the approved equipment lists. From the corporate chain perspective, helping franchisees to capture these rebates and cost savings are among the many ways that corporate chain accounts look to assist franchises to be successful. For SoCalGas, these represent therm savings that they helped to influence through equipment presentations and working with chain accounts on their equipment specifications.

5.3 Potential Savings from Process Changes

Process changes are defined as energy efficiency improvements arising from the purchase of new equipment that leads to changes in the way food is cooked, rather than just therm savings from using a more efficient model of the same equipment type. One example given during the participant interviews includes using a steamer instead of pots of boiling water from the range. Process changes can lead to savings when a customer reduces operating hours or temperature settings on existing equipment, as a result of purchasing new equipment, that potentially leads to a net therms saving.

Several issues arise related to investigating the potential savings related to these types of changes:

- Process changes (and equipment replacements) vary significantly from customer to customer
- Not all process changes lead to therm savings
- Determining the base case for calculating therm savings may not be straight-forward

Process changes are unique to different customers, depending on the types of food they are cooking, layout of the kitchen and many other factors. Since not all equipment change lead to therm savings, each project must be evaluated separately to assess the potential for savings. Results of the participant interviews strongly suggest that the purchase of new equipment (whether rebate qualifying or not) often leads to therms saved relative to the process and equipment previously in place.

Although process changes may lead to energy savings when new equipment is purchased, the question of base case becomes important in determining if the FSEC is leading to savings beyond business as usual. If restaurants are upgrading processes to what is now standard procedure, then there are no demonstrable therm savings to be claimed by SoCalGas. Any therm savings "credit" to the FSEC for process efficiency improvements must be calculated for each individual project.

5.3.1 Results of analysis

One channel for FSEC to claim credit for process changes it has influenced, may be through the existing SoCalGas Business Energy Efficiency Program (BEEP). The "Process Equipment Replacement and



Custom Process Improvement" program component of BEEP focuses on improvement measures related to specific industry sectors working closely with account executives. The program has primarily rebated measures such as furnace, kiln, and oven replacements that are part of a project to implement comprehensive energy efficient processes. The focus of the PER and CPI program can be seen as complementary to the EER Food Service rebate program, since it has a focus on small to medium sized customers who do not have energy efficiency managers.

While KEMA found evidence of such improvements, it was beyond the scope of this project to perform engineering calculations and conduct market-based research to determine therms savings related to specific customers. Instead, a very rough estimate of savings is sketched out in Figure 5-3 to assess the scale of the potential for attributable savings to FSEC.

Figure 5-3 Back of the Envelope Savings Estimate Related to Process Improvements

1031 FSE equipmen presentati	t 🗙	17% who purchase equipment leading to process efficiency	x	25% of projects save quantifiable therms	x	250 therms saved per project	=	10,954 therms savings potential	
	4	В		С		D	J		ı
	Explana	ation of assumptions							
А	Approxir	mately 1031 total pieces of	equi	pment presented fr	om .	January 2006 -	- Mar	ch 2008.	
В	B Based on interview results, approximately 17% of respondents indicated they went on to purchase the equipment they viewed. Assume that all equipment purchases are associated with process changes.								
C	C Not all equipment purchases and process changes lead to significant therm savings relative to the baseline. Furthermore, a small portion of these purchases may be rebated through EER. Assume 25% of these equipment purchases do lead to therm savings. This is an estimate, and not based on any research or other data.								

Although the above back of the envelope calculation results in a relatively small savings estimate, the assumptions are inherently uncertain and certain customer projects may merit a closer look at the potential for savings.

Assume 250 therms saved, on average, for a process improvement⁷

5.4 Potential Savings from Changes in Operations and Maintenance

Apart from process improvements, customer may also be improving their operations and maintenance procedures in ways that save energy. O&M changes are different from process changes in that savings are related to changes in the operations of existing equipment, and not related to the purchase of any new equipment. Examples of O&M improvements include changing filters (vent, water, and oil), changing behaviors (e.g. shut down and start up times) and cleaning processes.

D

⁷ Based on ENERGY STAR "Putting Energy into Profits: ENERGY STAR ® Guide for Restaurants" (page 7) assertion that a restaurant can save "\$250 annually by cutting three hours of griddle standby time per day." Assume \$1.00/therm, results in an estimated 250 therms saved annually.



In addition to presenting equipment to its visitors, the FSEC also provides operations and maintenance (O&M) recommendations to improve the field performance and efficiency of food service equipment. FSEC staff distributes a flyer, "Equipment Maintenance for Optimum Efficiency: User's Guide to Cleaning and Maintaining Natural Gas Commercial Foodservice Equipment" (Figure 5-4) via their website and to some equipment presentation attendees, that lists many steps that can be taken to maintain and clean natural gas commercial food service equipment.⁸ The FSEC also offers a specific seminar that uses this document as a handout.



Figure 5-4 SoCalGas O&M User's Guide for Natural Gas Foodservice Equipment

Within this flyer, and another produced by and available through the website for the Environmental Protection Agency (EPA)⁹, tips are provided for certain equipment types. This publication (shown in Figure 5-5) is based on content originally developed by the California Flex Your Power program, supported by SoCalGas and other California investor owned utilities. These resources indicate recognized opportunities for O&M improvements that yield energy benefits.

⁸ Equipment Maintenance for Optimum Efficiency: User's Guide to Cleaning and Maintaining Natural Gas Commercial Foodservice Equipment. The Gas Company, May, 2004.

⁹ Putting Energy into Profits: ENERGY STAR® Guide for Restaurants. EPA. May, 2007.



Figure 5-5 ENERGY STAR Guide for Restaurants



The ENERGY STAR[®] brochure cites recommendations for 11 types of natural gas commercial food service equipment. In general, it is difficult to quantify the savings realized by following either the SoCalGas flyer regarding equipment maintenance for optimum efficiency or those recommendations offered by the ENERGY STAR website for commercial kitchens. Besides the increased number of types of food service equipment that are addressed in the ENERGY STAR brochure compared to the Gas Company's flyer, there are three changes that have quantified savings:

- For gas fryers, the ENERGY STAR brochure recommends cutting back the idle time by four hours per day. Using the deemed savings numbers in the previously referenced workpapers, this would yield and additional estimated savings of 131 therms/year for energy efficient models or 204 therms/year for base models.
- For gas griddles, the ENERGY STAR brochure recommends cutting back the time of standby time by three hours per day. Using the deemed savings numbers in the previously referenced workpapers, this would yield an estimated savings of 175 therms/year for energy efficient models or 208 therms/year for base models.
- For connectionless steamers, the ENERGY STAR brochure recommends cutting back the standby time by one hour per day. Using the deemed savings numbers in the previously referenced workpapers, this would yield and additional estimated savings of 46 therms/year for energy efficient models or 58 therms/year for base models.



Table 5-3
Estimated Savings related to O&M Modifications to
Presented Equipment that is Rebate Qualifying

Equipment Category	O&M therms/yr/qualified unit	Average qualified presentations per year	O&M therms/yr/ base unit	Average non- qualified presentations per year	Combined O&M therms/yr potential savings	Overall therms/ year/ unit
Fryer	131	12.4	204	35.6	8,887	8,887
Griddle	175	24	208	8	5,864	5,864
Steamer, Pressureless	46	3.6	58	12.4	1,244	1,244
Totals		40		56	15,995	15,995

O&M changes are unique to different customers, depending on the types of food they are cooking, hours of operation, production volume and many other factors. Since some equipment changes do not lead to therm savings, each project must be evaluated on a custom basis to assess the potential for savings. Results of the participant interviews suggest that visits to the FSEC (whether to view rebate-qualifying equipment or not) often leads to therms saved relative to O&M modifications.

Similar to the issues of claiming process improvements, if restaurants are upgrading O&M practices to what is now standard procedure, then there are no savings to be claimed SoCalGas. Additionally, any therm savings "credit" to the FSEC for energy efficiency improvements would likely need to be calculated for each individual project, due to the range of possible O&M improvements across customer facilities.

5.4.1 Results of analysis

It is unlikely that FSEC will be able to claim credit for changes to O&M practices, since California Public Utilities Commission (CPUC) policy has been to only recognize savings associated with the installation of new equipment. O&M energy savings are considered indirect savings and have not been recognized by the CPUC for claiming savings. However, for the purposes of estimating the extent to which FSEC equipment presentations lead to additional therm savings above and beyond the Food Service Rebate program, an estimate of the magnitude is provided in Figure 5-6.







	Explanation of assumptions
A	Approximately 119 presentations (out of 1031 total) were made of fryers, griddles and pressureless steamers from January 2006 – March 2008.
В	Based on interview results, approximately 46% of respondents indicated they went on to make operations & maintenance changes, following their equipment presentation at the FSEC.
С	Not all equipment purchases lead to therm savings. 50% is selected as the proportion of projects leading to quantifiable savings, and not based on any research or other data.
D	Assume 145 therms saved, on average, for a O&M practices improvements

Since the back of the envelope savings estimate is small, and CPUC policy is clear on not allowing indirect savings to be included in the claimed savings approach, pursuing specific steps to try to claim these savings is not believed to be a good use of time.

Yet, FSEC should continue to document its efforts to assist customers with O&M improvements, to continue to justify its funding by the statewide education and training program. It has been the practice of the FSEC to schedule all requested equipment presentations/demonstrations without any preference for qualifying models. From Q1 2006 through Q1 2008, 60% of the presentations were for equipment from categories that offered qualified models. Another 28% of the presentations during that span were for unqualified equipment for which there are associated best practices per an ENERGY STAR® website. The remainder of the presentations, or 12%, were conducted to view unqualified equipment without associated best practices. This information may be useful as the FSEC looks at ways to prioritize the types of presentations that they schedule, the relationships that they foster, and the information that they emphasize in their efforts to promote energy efficient practices in the food service industry.



6. Case Studies

In this section, we further examine how the actions and purchasing decisions of three specific customers have lead to energy savings that may be attributable to FSEC equipment presentations. The three customers represent one chain account, one large mass market customer and one small mass market customer to better understand the opportunities and challenges across different customer types.

The goal of the case studies was to document the energy savings achieved from equipment installed with or without rebate assistance, but influenced by participation in the FSEC presentation event. The case studies were seeking credible evidence of energy savings attributable to the FSEC presentations.

6.1 The Counter

As a chain account, The Counter was established in 2003 to provide customers with custom-built gourmet burgers. Headquartered in Southern California, the chain now has 4 locations within the SoCalGas service territory, 3 locations in Northern California and an additional 6 locations across the country. All restaurants locations are currently franchises. The Counter intends to open one corporate owned restaurant before the end of this year.

The Executive Chef is the main company contact who has attended equipment presentations at the FSEC on behalf of The Counter. Recently, The Counter hired a new Director of Construction to work directly with equipment manufacturers to select appropriate equipment for their operations. The Counter is expanding rapidly, and intends to have an additional 9 restaurants open by the end of this year, with 4 of these restaurants located in Southern California.¹⁰

The Counter has installed essentially identical kitchen equipment in each of its locations thus far. Each restaurant has a 72 inch grill, a 3 vat fryer, a griddle, and a combined convection oven and 4 burner range. None of these equipments is believed to have been rebate qualifying.

As part of his work with The Counter, the Executive Chef has attended three FSEC equipment presentations so far. The Director of Construction has also attended multiple equipment presentations and has been visiting the FSEC for about six years on behalf of his previous employer. Together, the Executive Chef and Director of Construction work in tandem to evaluate different cooking equipment to improve their kitchen operations.

6.1.1 Use and Influence of the FSEC

In the beginning, The Counter visited the FSEC to start testing grills. The selection of the right grill was paramount to the success of The Counter, since their flagship product is the burger. During this visit, they viewed several brands at the same time and tested the grills with actual burgers. Specifications they look at include the right balance of BTU output, grate, construction and how close the flame is to the burger. They eventually selected a Lang grill. Since then, they have installed approximately 22 of these grills across all of their stores.

According to The Counter staff, FSEC equipment presentations are valuable, not just for the ability to test different models, but also for the exposure to different types of equipment he would never otherwise see,

¹⁰ Based on The Counter website. <u>http://www.thecounterburger.com/comingsoon/</u>



even at a food show. As an example, during one of their visits to test grills, the conversation shifted to what kind of hood would be most efficient. FSEC staff was able to bring him over to an energy efficiency hood with a cleaning system, and that also shuts off given certain parameters.

Although the restaurant representative had visited the FSEC to view grills, he also learned a lot about improving energy efficiency of hoods. Subsequent to this visit, he has integrated the attributes of that hood into his equipment specifications for hoods. They have begun to evaluate whether they need a self-cleaning hood, and to understand how the fan operations affect the energy costs of the restaurant.

The Counter staff indicate that they are always looking to re-evaluate their equipment choices. Several months ago, they visited the FSEC to look for an alternative to the Lang grill and will visit the FSEC again shortly to look at more grill options. Currently, they are looking to replace their old charbroilers that operate at 180,000 BTUs each, with newer ones that only use 120,000 BTUs.

The Counter is also looking at a new fryer for their operations. They have installed approximately 22 Pitco SG18-S three vat fryers in their restaurant locations and may start buying Dean D60-G-C-UFF two vat fryers in the new stores. These Dean fryers are computerized, and The Counter representatives indicate they are also rebate qualifying. The old Pitco units used 540,000 BTUs, and the new fryers will operate at 300,000 BTU.

Overall, The Counter is looking to test and re-evaluate the chains equipment specification and both company contacts intend to return to the FSEC to help them to do this. They prefer to do their tests in the controlled environment of the FSEC without the sales pressure from marketing representatives. In fact, they forbid the marketing reps from attending their equipment presentations and relies on the assistance and expertise of FSEC staff.

The Counter says that in addition to the controlled environment, they would also like to test in a mockkitchen set up. If that scenario existed, The Counter would be able to block out time to do actual training, as opposed to doing it at a restaurant, and this is a service that they would be willing to pay for.

6.1.2 Suggestions for the Food Service Equipment Center

The Counter has previously not pursued any rebate qualifying equipment, and was not aware of whether any had even been purchased. With the new Director of Construction, he is now reviewing The Counter's previous purchases and equipment specifications to assess whether any of their equipment would qualify for any rebates. He has not yet found any.

For future purchases, energy efficiency is an important consideration in selecting equipment. For example, the company representative uses the list of rebate qualifying equipment that he gets from the Los Angeles Restaurant Show as a starting point for evaluating potential new equipment.

The Counter looks for opportunities to assist franchise owners to succeed, including pursuing ways to reduce operating costs for franchises. Since, previously, most of the kitchen equipment has not been rebate qualifying, leveraging rebate programs has not been a focus of any cost savings efforts.



6.1.3 Opportunities for Attributing Savings to FSEC Presentations

As a closing remark, The Counter's representative mentioned that in all his work with gas utility companies across the country, his experience with SoCalGas has been "unparalleled" and the service provided by the Food Service Equipment Center is exemplary. The results of this case study show that The Counter restaurant relies heavily on the equipment presentations provided at the FSEC to assist them in selecting equipment to be installed across each of their restaurant locations.

In reviewing the potential therms savings from The Counter's actions attributable to FSEC equipment presentations, there are several conclusions:

- There is a fundamental difficulty in proving therm savings related to equipment specifications and attributing any savings to the FSEC equipment presentations alone.
- The approach most likely to pass CPUC scrutiny would be via the actual purchase and installation of approved rebate qualifying food service equipment.
- The easiest way for the FSEC to prove that these rebate qualifying equipment was installed according to rebate program guidelines is to assist The Counter and its franchises to submit rebate applications.

6.2 Universal Studios Hollywood

As a large mass market customer, Universal Studios Hollywood is one of the oldest and most famous Hollywood movie studios still in use, and has also evolved over the years into a full theme park. Located in Universal City, California, the park covers more than 400 acres, with as many as 40,000 visitors on a peak day and between 30 - 35,000 on a busy day. The Director of Facilities indicates that the park has 18 restaurant kitchens and 1 central production kitchen. All of the restaurant locations within the park boundaries are owned and operated by Universal Studios or co-branded.

According to company representative, Universal's restaurant venues produce and sell food volumes 5-7 times that of a typical street venue outside of the park. The central production kitchen supports this volume of output by pre-preparing various food items to be sold in the park restaurants. For example, the co-branded Pizza Hut restaurant offers a limited selection of pizzas at Universal Studios. The pizzas are pre-topped and pre-thawed in the production kitchen before being brought to the actual restaurant location. This saves on space that would otherwise be needed to prepare the individually ordered pizzas, thus allowing for additional oven and production capacity.

6.2.1 Use and Influence of the FSEC

Universal Studios Hollywood has been visiting the FSEC for over 13 years for equipment presentations, seminars and industry meetings. Some of the primary benefits of the equipment presentations at FSEC for Universal Studios are that the environment is free of distractions and hosts numerous brands and models to compare. As the company representative put it, "When you are there, you are there to focus on the equipment and the testing." He finds that a group of people can focus for 4-6 hours and that the Gas Company has all the additional testing equipment on site to help with the demonstration including thermometers, timers, among other things. He stressed that it is very difficult to conduct these tests on site because it requires installing a piece of equipment at Universal Studios and carving out time when they aren't operating the park, or the kitchens, to conduct the test.



Another benefit of the FSEC is that it allows you to look at many different pieces of equipment at once. This is an advantage because "the marketing reps have to be really truthful because their competition is usually right there listening."

Although Universal Studios is not a chain and they rarely buy the same piece of equipment twice, they do consistently purchase significant volumes of cooking equipment, leading vendors to work with them to customize equipment. Universal Studios uses the FSEC to "...test fryers against fryers and broilers against broilers" and meet with product representatives to test and work out custom specifications when making purchase decisions. Being able to touch, feel and cook on the equipment is invaluable. He provided the following examples to demonstrate how seeing and cooking on the equipment has led to interesting findings that have affected the purchase decision.

Broiler Test

Universal Studios conducted a broiler test with the manufacturer Gladstone to assess the most effective way of cooking 2.5" steaks. They also wanted the broiler to cook other types of food. Going into the FSEC, Universal Studios assumed that the broiler with the greatest heat output was likely to be the best one. After testing five to six broilers, however, they found the hottest broiler to be too hot and they needed to slow down the steak cooking process. While at the FSEC, they worked with a marketing representative to create a custom broiler/oven combination that could do the job properly.

Griddle Tests

A while ago, Universal Studios used the FSEC to a test duplex cooker (essentially a two-sided griddle). During the equipment presentation, they were able to verify that it cut the hamburger production time in half because it cooked the hamburger on both sides at the same time. From an energy standpoint, it is not an energy saving process change, but its main benefit is to cut cook times from 8 minutes with mono-sided cooking to 4 minutes using the duplex.

More recently, the Universal Studio food service team were interested in purchasing a particular griddle based on the manufacturer specifications. When Universal Studios brought several boxes of hamburgers in the FSEC, and "loaded the griddle down," they found that the recovery time was not as fast as the specs said. The company representative indicates that "hands on, a lot of times, specs don't tell the full story," and FSEC equipment presentations are important for providing a real life experience working with the equipment. Based on an equipment presentation of the Wolf Griddle IRG36F-21 at the FSEC, Universal Studios went on to purchase one unit without applying for a rebate.

Combination Oven Test

The FSEC equipment presentations have influenced Universal Studios numerous times when making purchases or creating processes. The company representative recalls testing a combination oven. Their original intention was to use a lower price combination oven, but after thorough testing they chose another because it had better performance. He says this was something they wouldn't have been able to see without the FSEC.

Fryer Test

Universal Studios Hollywood also tested a Frymaster fryer, the H50, and is aware that there is now a newer model, the H55. Our contact stated that they "will probably go to the Gas Company to test that too"



and that another manufacturer has said they would beat the performance of the H55. They have not yet gone to the FSEC to test these pieces of equipment, which are believed to be rebate qualifying models.

6.2.2 Challenges Inherent in the Food Service EER Program

The company representative estimates that Universal Studios has likely purchased hundreds of rebate qualifying equipment over the years, without actually getting any rebates. They have not been able to submit rebate applications because of the need to show proof of payment. The Universal Studios accounts payable systems does not enable the facilities department to easily access any of the receipts or invoices once the purchase order is submitted. This is an acknowledged problem, and that the Gas Company has been working with staff at Universal Studios to resolve this issue, since Universal's accounts payable department has not been able to send any invoices or proof of payment.

Another challenge that Universal Studios face in getting rebates is the pace at which they operate and make purchases. They move quickly because funding is often allocated at the end of budget cycles and they have to go directly to the manufacturers to expedite the process. In the past, to apply for a rebate, a reservation must be made for funds before submitting a request for the purchase order. Universal Studios stated that, "the Gas Company couldn't move fast enough."

Since then, Universal Studios has created a "Quality Team" consisting of engineers and finance staff to work through these issues and to pursue the utility rebates. In addition to food service rebates, Universal Studios wishes also to capture rebates related to other facility upgrades to lighting and HVAC, among other things. It was noted that Universal Studio staff have found the rebate programs to be easier now.

Part of the problem in the past is that their account executive would change frequently, and there would be no consistency in the relationship. The company representative lauds the staff at the FSEC as a stable group of people who been there for years. This is important for Universal Studios because the importance of rebates has increased from an energy standpoint.

6.2.3 Opportunities for Attributing Savings to FSEC Presentations

Overall, this case study provides an example of a large mass market customer who has used the FSEC for many years to assist with final equipment purchase decisions. By their own estimation, Universal Studios has purchased "hundreds" of rebate qualifying equipment over the years without ever pursuing a rebate.

At Universal Studios, there is a renewed focus on improving energy efficiency in park operations, across all end uses such as lighting, HVAC, cooking equipment. Whether a piece of equipment is rebate qualifying is seen as an indication of energy efficiency. In the past, cost savings was the primary consideration but now energy efficiency is used as a qualifier. The project approval process now looks at the energy efficiency of equipment, which helps to sell the project. Overall, Universal Studios is trying to reduce greenhouse gas emissions and their energy bill.

The Food Service Equipment Center clearly plays an important role in providing Universal Studios Hollywood with the necessary information and hands-on experience to be confident in their choice of energy efficient equipment. Across the two interviews with Universal Studios Hollywood, no other specific process or O&M improvements have been identified to result in gas savings. Therefore, based on this case study, there are two main conclusions:



- FSEC equipment presentations have influenced Universal Studios Hollywood to save therms through the purchase energy efficient equipment.
- The easiest and most defensible route to capturing these therm savings for SoCalGas is to ensure that Universal Studios Hollywood applies for the appropriate rebates under the Food Service Rebate Program. This is due to the fact that therms savings associated with qualifying equipment has already been well-vetted and no new CPUC filing is needed.

6.3 Royal Baking Company

Royal Baking Company is a small family-run operation that manufacturers Asian breads and buns for the wholesale market. They sell their products to out-of-state distributors who work with Asian markets. Begun about a year ago, Royal Baking Company is a very small family-run business that operates out of a 5,000 square foot facility. Our company contact describes himself as the "owner, founder and manager" of the business. The family has a history in the food service industry, with a bakery shop that has been in business for 20 years in Rosemead, CA.

The Royal Baking Company facility has a monthly utility bill of about \$1000 for electricity and \$600-700 for gas. Their facility has a revolving oven, Rational combi oven, a couple of mixers, and one steamer imported from Taiwan.

6.3.1 Use and Influence of the FSEC

The owner indicates that awareness of the equipment installed at his brother's bakery shop helped him to choose equipment for his new company. For example, he first tried out the revolving oven and steamer from his brother's bakery and decided to translate them into his own operations.

When looking for a new combi oven, he first approached the Rational equipment dealer who recommended that he visit the FSEC to take a look. During his first visit to the FSEC, he viewed, but did not cook on, the combi oven and also viewed a couple of pressureless steamers. The owner indicates that the Gas Company passed out brochures during his presentation and also told him about the \$750 rebate on the Rational combi oven SCC102G that he viewed.

When purchasing and investing capital in such an expensive piece of equipment, the owner prefers to try it out first and "test drive it." Following his visit to the FSEC, Rational had the marketing representative accompany Jeff to a different test site, the Rational test kitchen, and enabled him to bring his product to try out the combi oven there. He ultimately decided to purchase the combi oven because of its ability to both bake and steam products and with a rolling rack that could be easily moved. The Rational combi oven cost approximately \$24-25,000 before the rebate.

The owner says that it was actually the visit to the Rational test kitchen that cemented his decision to purchase the Rational combi oven. He was never able to cook on the Electrolux combi oven, and says this was a factor in his decision. However, if he had not had the opportunity to visit the FSEC initially to compare different brands, he thinks he would have been unlikely to make the same purchasing decision.

6.3.2 Process Changes

Now that Royal Baking Company has a combi oven to assist with steaming, they no longer uses pots of boiling water to steam their product. Previously, they used about a 10 gallon pot on the range and it would



take approximately 15-30 minutes for the water to come to a boil. He was not able to provide an estimate of the BTU consumption of his range. However, for an estimate of magnitude, a 36 inch range from American has 32,000 BTU/h per open burners.¹¹

Assuming that Royal Baking Company would have normally done this twice a day using 2 burners, the therm savings related to this process change is estimated at:

32,000 BTU saved/day/per burner x 2 burners x 365 = 23.4 MMBTU saved = 234 therms saved per year

This does not take into account the additional therms used to operate the combi oven. In this case, it appears that there are demonstrated therm savings, but it is expected to be relatively small.

6.3.3 Rebate Application Process

The owner says that the FSEC staff provided him with a rebate application and after he decided to purchase the Rational combi oven, he filled out the application himself and submitted it. He did not encounter any difficulties or problems with the application process.

6.3.4 Opportunities for Attributing Savings to FSEC Presentations

Overall, this case study examines the purchasing decision process of a small family run business that manufactures and sells products to the wholesale market. Through Royal Baking Co's interactions with the equipment dealers, marketing reps, visits to the FSEC and to Rational's test kitchen, the owner ultimately chose an energy efficient combi oven. Since he submitted a rebate application for the equipment, SoCalGas has been able to capture the therms savings associated with this purchase.

Through our interview with Royal Baking Company, one process improvement is believed to have led to energy savings in their facility, but several issues arise in trying to claim these savings;

- 1. The therm savings may not be large on a per customer site basis; and
- 2. These entail a calculated savings approach and the need for a defensible base case scenario.

It is unclear whether steaming using pots of boiling water is a common industry standard from which using a steamer or combi oven is beyond business as usual. If most food service companies are no longer using pots of boiling water and Royal Baking Company is merely upgrading to common industry practice, it may be difficult to claim these savings as attributable to SoCalGas.

To capture process improvement therm savings in a way that will pass CPUC scrutiny, the easiest path is to pursue claimed savings under an established process improvement incentive program like the Process Equipment Replacement and Custom Process Improvement program. Over time, if enough of the calculated projects are processed and approved, these may ultimately become a prescriptive measure with deemed savings.

¹¹ <u>http://www.americanrange.com/ranges/36ranges.html</u>



7. Recommendations

The Food Service Equipment Center located in Downey, CA, is a highly regarded resource for food service customers in the SoCalGas service territory and nation-wide. Interviews with customers and upstream market actors indicate that the "library" of cooking equipment available to the public in a neutral setting is an important asset to the industry.

KEMA's research has found that FSEC equipment presentations are highly influential in assisting customers with making decisions about food service equipment and for educating the public about energy efficient cooking equipment. Aside from influencing the purchase of energy efficient equipment, the FSEC equipment presentations are also found to help chain accounts to develop specifications leading to more efficient equipment and process decisions and to educate customers about the importance of O&M best practices.

The results of this project show that FSEC equipment presentations lead to therm savings beyond what is currently being claimed under the Commercial Food Service EER program, potentially representing an additional 10% therm savings. To claim these additional savings, KEMA believes that FSEC staff should focus on the established channels for claiming rebated therm savings as these are not being fully exploited. This includes both the Commercial Food Service EER program and the Custom Process Improvement programs. Efforts to claim non-rebated therm savings are not expected to easily pass CPUC scrutiny due to the complex issues of attribution and baseline determinations, and therefore, not recommended by KEMA at this time.

The purpose of the following recommendations is to assist FSEC staff to more fully utilize existing channels for capturing therm savings. The recommendations are the results of our analysis and are prioritized according to both degree of effort and the potential magnitude of additional therms to be claimed.

7.1 Capture More Savings from Existing Rebate Qualifying Purchases

Customers are found to go on to purchase rebate-qualifying equipment after seeing the equipment in action at the FSEC, but many do not submit rebate applications for their purchases. Since this is an established channel for SoCalGas to claim "credit" for customer purchases of energy efficient equipment, and FSEC presentations clearly influence purchase decisions, this is viewed as the easiest and most direct way to claim savings associated with FSEC equipment presentations. It is important to carefully document and assess the extent to which FSEC has influenced customers' planned purchase decisions to reduce the potential for free-ridership.

Figure 7-1 provides a framework for documentation and follow-up with customers to best capture savings that are attributable to FSEC equipment presentations. Since customers sometimes have difficulty providing the typical documentation required by the Commercial Food Service EER program, the below flow-chart is provided to assist FSEC staff with appropriate follow-up. The flow-chart details a set of alternative documentation and post-inspection procedures to enable SoCalGas to claim the therm savings related to customer purchase of efficient equipment they viewed at the FSEC.



Figure 7-1 Framework for Alternate Documentation to Claim Savings under EER







The following recommendations highlight key points in the above decision-making flow-chart.

Recommendation: Continue to offer exemplary service to SoCalGas customers and continue to assist customers with improving energy efficiency in their facilities and submitting rebate applications. FSEC staff play an important role in influencing customers to change their operations in ways that save therms. Staff should continue to identify customers who purchase rebate qualifying equipment and provide assistance and follow-up to ensure that a rebate application is submitted.

Recommendation: At the conclusion of a presentation, have visitors indicate the likelihood of purchasing equipment viewed, and then follow-up with customers who indicate a high likelihood to



buy rebate-qualifying equipment. This could be done by asking the visitor(s) to complete a questionnaire, probably verbally, in which the following information is gathered:

- The likelihood of their purchasing the equipment demonstrated in the next 3 months;
- The likelihood of their purchasing a qualified model of demonstrated equipment;
- If qualified equipment is purchased, the likelihood of applying for a rebate;
- Whether they received a blank rebate application;
- Whether they received an explanation, both verbal and written, of the best practices for the demonstrated equipment as per the previously cited ENERGY STAR[®] website.
- List every type/model of food service equipment that was viewed or discussed and whether each piece was rebate qualifying or had rebate-qualifying alternatives available.

For those indicating a high likelihood of purchasing demonstrated equipment in the next 3 months, conduct follow-up telephone calls to learn about decisions made. If visitor went on to purchase qualified equipment, determine whether a rebate application has been submitted and if not, offer additional assistance to help them submit one. See Appendix A for an example of such a form.

Recommendation: Identify which chains have rebate qualifying equipment on their list of eligible equipment for franchisees and work with them to distribute rebate program data and applications. As a result of using the FSEC equipment presentations, several chains were found to have developed equipment specifications and eligible equipment lists that include rebate qualifying equipment. It would be preferable that the specifications dictate the use of available rebate-qualifying equipment rather than specifying minimum efficiency standards so as to avoid being interpreted as the base case. In general, corporate-owned restaurants were found to have a high rate of rebate applications, with franchised restaurants being less likely to apply for a rebate even when purchasing qualifying equipment. Therefore, developing a coordinated outreach strategy to franchises could capture more savings from franchise purchases of rebate qualifying equipment, and help franchises to be successful.

7.2 Increase the Number of Rebate Qualifying Purchases

The FSEC already promotes the energy efficient versions of equipment when possible, but another way to capture more therms savings is to more heavily market rebate qualifying models in the effort to further increase the number that are purchased. This represents the first two steps as shown above in Figure 7-1. By expanding the number of customers who are educated about the energy efficient models, presumably a larger number of customers may go on to purchase this equipment, leading to more therm savings.

Below are some additional recommended strategies for further highlighting the rebate qualifying equipment to customers who visit the FSEC, in the hopes that such information and emphasis will lead to additional purchases of rebate qualifying equipment.

Recommendation: Usage signage and informational tags to highlight the energy efficient equipment on the floor. Develop and display signage for each equipment (e.g. similar to ENERGY STAR® signage used for consumer appliances) that shows the therm savings and other benefits of rebate qualifying



equipment. This allows customers to see, at a glance, which equipment on the floor is deemed to be energy efficient as well as the suite of eligible technologies. Even if they are not there to view a rebatequalifying equipment, this can serve as a visual reminder that rebates are available and to consider an energy efficient model in the future.

Recommendation: Consider creative ways to increase the number of presentations of rebate qualifying equipment, without jeopardizing the variety and suite of equipment options available to customers. Presently, there is no effort to persuade a prospective visitor to view qualified equipment while scheduling an event. By influencing the equipment to be demonstrated, the FSEC can hope to improve awareness that qualified alternatives exist. Below are some "creative" ideas:

- When an unqualified equipment demonstration has been requested for which there are qualified alternatives, only schedule the demonstration once the prospective visitor has agreed to view one or more qualified alternatives during the same visit.
- Limit the times during which equipment without qualified options can be demonstrated, e.g. one day per week.
- Consider charging visitors for equipment presentations, to vary based upon the average cost of equipment category and whether the models being viewed are rebate-qualifying, Such an FSEC usage fee could be fully reimbursed upon receipt of proof of rebate application and would serve to communicate the increasing priority of energy efficiency.

7.3 Capture Therm Savings from Process Improvements

In cases where equipment, for which no energy efficient standard is available (e.g. deck ovens), there may be verifiable therms savings related to process improvements. The SoCalGas Business Energy Efficiency program already has a component to capture process improvements from small to medium businesses that work with their account executives to demonstrate savings. Since this is an established program, this would likely be the easiest way to capture savings related to process improvements that would pass CPUC scrutiny.

Recommendation: Assess one or two specific instances of process improvements and see if these savings could be captured through the BEEP Process Equipment Replacement and Custom Process Improvement program. FSEC staff can identify one or two promising instances of process improvements, and work with the appropriate account executive to reach out to the customer to assess the potential to get incentives that will buy-down the cost of their project or equipment purchases. The account executive is an important component of this program and currently serves as the key SoCalGas representative who facilitates the incentive application process.

7.4 Restructure the Rebate Program to Increase Participation

Equipment dealers, marketing reps, manufacturers and food service designers already play a significant role in assisting customers with equipment purchases and influencing purchasing decisions. These types of vendors can be essential for both getting customers to purchase rebate qualifying equipment, and for assisting with the rebate application process themselves. Recognizing this, the Commercial Food Service EER program is offering a vendor incentive (i.e. spiff) from September 15 through December 15, 2008 of \$10-\$20 total depending on whether a paid invoice or completed rebate application is submitted.



Another issue identified as an obstacle to the rebate application process relates to chain accounts. Franchises with centralized equipment distribution/invoicing practices struggle to document where qualifying equipment has been installed. Without this information, a rebate application cannot be submitted.

Recommendation: Continue to offer incentives for vendors that work with customers who buy rebate qualifying equipment. One way is to continue to periodically offer a "spiff" incentive available to vendors for a limited time, when their customers submit rebate application or a paid invoice (for a smaller spiff). Or, another vendor recommended a program similar to SCE, where the rebate program allows dealers to do the rebates for the customers and receive a portion of the rebate dollars for "administrative expenses."

Recommendation: Restructure rebate program to ease equipment destination requirements. One way to do this may be to create a custom channel that incorporates a post-inspection of the installation, provided the customer first viewed the equipment at the FSEC. One way to focus this effort would be to identify the largest chain accounts in the SoCalGas territory and target these for partnership on both equipment destination issues and enabling franchise owners to capture more rebate dollars. One way to address equipment destination requirements is to devise acceptable documentation alternatives to supplement the equipment invoice showing the where the equipment was ultimately installed. Without this, it will only be worthwhile to track and follow-up with franchises with local purchasing authority.

7.5 Continue to Document FSEC Efforts that Save Customer Energy

The FSEC is an important player in the food service industry, helping customers to improve energy efficiency and O&M at their facilities. Although these types of activities clearly lead to customers saving therms, the opportunity to prove savings is limited under current policy guidelines. Therefore, the FSEC should continue to document these types of efforts, and show how FSEC works to transform the market.

Recommendation: Document when FSEC equipment presentations are for the purpose of helping chain accounts to develop equipment presentations. In general, it is difficult for utility energy efficiency programs to claim credit for equipment and purchasing specifications of its customers. Despite this, FSEC should document its influence on assisting chain accounts with equipment specifications and be able to point to concrete examples. This type of documentation could potentially be used in the future to prove more concrete and attributable therm savings.

Recommendation: Include in the FSEC tracking database a field for whether the equipment is rebate qualifying and, if not, whether rebate-qualifying alternatives exist. Currently, the tracking database does not clearly show which presentations were for rebate qualifying equipment, which made it cumbersome to show that FSEC emphasizes energy efficient equipment above and beyond the standard market penetration rate. Although whether equipment is rebate qualifying or not may change, noting that it was rebate qualifying at time of presentation is an important documentation of FSEC efforts.

Recommendation: Ensure that the FSEC presentation tracking database includes every equipment viewed by a customer even if it was informally presented. Ensuring the FSEC database includes every type/model of food service equipment that was viewed or discussed including whether each piece was rebate qualifying or had rebate-qualifying alternatives available would help to set the stage for attempting to capture the resulting process savings that might be taking place. This type of documentation also helps



to justify the use of ratepayer funds and to show that scheduled equipment presentations lead to informal discussions on energy efficiency of other equipment, too.



8. Conclusion

Without a doubt, the SoCalGas FSEC plays an important role in the food service industry in both the local and national markets, by promoting energy efficient equipment, testing equipment to improve efficiency standards and acting as a clearinghouse for information on energy best practices. FSEC staff are to be commended for their industry expertise and world class customer service. Presentation participants and market actors were consistent in their high praise for the services provided by the FSEC to customers in the SoCalGas service territory and beyond.



9. Appendix A: Templates for Documentation

Example: Post visit survey form

For office use only:

Date:	
ER101_EVT_ID:	

Thank you for attending a presentation at the Food Service Equipment Center. To help us serve you better in the future, please answer the following questions.

Name:	
Title:	
Company:	

Higl	Highly Disagree			Highly Agree		
	1	2	3	4		
My visit improved my knowledge of the cooking equipment viewed today.						
I am more likely to purchase the equipment viewed because of my visit today.						

	Very unli	kely		Very likely		
	1	2	3	4		
How likely are you to purchase any of the equipment presented today?						
Which one(s)?	-					
How likely are you to purchase this equipment within the next 6 months?	e					
If a rebate is available for a similar equipment, how likel are you to be interested in viewing it?	у					
Example: Verbal verification form

Name of Company:	
Contact Name:	
Contact Phone:	
Email Address:	

Equipment purchased (must correspond to FSEC presentation visit)

ER101_EVT_ID:	
ER101_VISIT_DATE:	
Equipment Type:	
Manufacturer:	
Model Number:	

<u>Site #1</u>	
Address:	
Contact Name:	
Contact Phone:	

	Verbal verification	Passes post-inspection? (yes/no)
Number of units installed		
Approximate date of installation		

<u>Site #2</u>	
Address:	
Contact Name:	
Contact Phone:	

	Verbal verification	Passes post-inspection? (yes/no)
Number of units installed		
Approximate date of installation		

<u>Site #3</u>	
Address:	
Contact Name:	
Contact Phone:	

	Verbal verification	Passes post-inspection? (yes/no)
Number of units installed		
Approximate date of installation		



10. Appendix B: Customer Interview Guide

Customers Interviewed

Boeing/McDonnell Douglas	Rocco Pizza
Cajun Swamp	Royal Baking Company
Charo Chicken	Royal Oaks Manor
Elephant Bar	San Sai Grill
El Pollo Loco	Santa Fe Farms Golf Club
Feed You Well	Santa Fe Importers
In-N-Out	Southern Pride
JJ Bakery	Stox Restaurant
Koo Koo Roo	Tam's Bar & Grill
Michael J's	The Counter
Nanoushee Restaurant	The Cravery
Nellson Nutraceutical LLC	Tutti Gutti
Noodle House	Universal Studios Hollywood
Normandie Casino	
Pizza World	



KEMA_ID:	1	How many events attended by this company?	
Event:	101 NOODLE HOUSE	VISIT_DATE_#	4/3/07 2:00 PM
Company:	101 NOODLE HOUSE	FSEC Coord:	Jill Bosich
Contact:	ONG, QUANG (OWNER)	Event Cat:	FS Demo Live
Address:	1388 FULLERTON RD,	Event Class:	Equipment Presentation (FSE)
	ROWLAND HEIGHTS, CA	Event Type:	Mass (EDS)
Phone:	626/307-0788	EQMT_QUAL_#	n
Email:	0	GROUP_QUAL_#	n
Rest. Class:	2	Eqmt. Code:	1
Presumed Utility:	SoCalGas/	EQMT_GROUP_#	Griddle - Doublesided
		EQMT_DESC_#	Lang CLAMSHELL GRIDDLE
# Contact Attempts:	0	EQMT_MODEL_#	G2E1
Interview Completed:	0	Rebate Rec'd	n

A. Introduction

Hello, this is ______ calling from KEMA. May I please speak with [Contact]?

On behalf of the gas company in your area, we are calling to conduct a follow-up study about your organization's visit to the Food Service Equipment Center in Downey (SE of Los Angeles).

According to the records provided to us, your company attended a/multiple demonstration(s) of [EQUIP_DESC_1, [EQUIP_DESC_2] and [EQUIP_DESC_3), etc.

Do you recall your organization's attendance and that/those demonstration(s)?

(If not, ask to speak with the more appropriate person. If needed, suggest the restaurant owner, facility manager or restaurant operator.)

Name:	
-------	--

Title:_____

My questions will be about your company's visit(s) to the Food Service Equipment Center, which we'll refer to as the Equipment Center from now on. My questions will take about 15 minutes to complete. Is this a good time to talk or should we schedule a time to call back in the next day or two?







Purposes: To learn about challenges only <u>from those that have completed a rebate application</u>.



Objective:

To learn about purchases outside of any equipment demonstrated at the FSEC.



<u>Table D3:</u> Purchased	D3a. Code (Circle all that	D3b. Qty. Bought	D3c. Fueled by 1. Nat. Gas 2. Electric 3. Both 98. Unknown/	D3d. Saw at FSEC? 1. Yes 2. No 98. Unknown/	D3e. Make & Model # [RECORD ANSWER] 98. Unknown/	D3f. Rebate Qualifying? 1. Yes 2. No 98. Unknown/
Eqmt. Categories	apply)		96. Unknown/ Refused	Refused	Refused	Refused
Oven, Convection	1					
" Combination	2					
" Single Rack	3					
" Double Rack	4	-				
" Conveyor	17					N/A
" Rotisserie	18					N/A
" Deck	19					N/A
" Tandori	20					N/A
Broiler, Underfired	21					N/A
" Overfired	22					N/A
Fryer	5		-			
" Large Vat	6					
Steamer	7					
" Pressureless	8					
Steam Kettle	23					N/A
Rethermalizer	24					N/A
Rice Cooker	25			<u></u>		N/A
Pasta Cooker	26					N/A
Braising Pan	27					N/A
Wok	28					N/A
Range (Stove)	29					N/A
Range/Griddle Combo	30					N/A
Griddle, Single	31					
" Doublesided	32					N/A
Holding Cabinet, Insul.	10					
Dishwasher	33					N/A
Refrigerator, Glass Door	11		2			
" Solid-Door	12		2			
Ice Machine, Tier II	14		2			
" Tier III	15		2			
Freezer, Solid-Door	13		2			
Kitchen Ventilation Control	16		2			
(Other, specify):	88					
(Don't know/Refused)	98					



<u>Table E2:</u> Might Purchase Eqmt. Categories	E2a. Code (Circle all that apply)	E2b. Poss. Qty.	E2c. Fueled by 1. Nat. Gas 2. Electric 3. Both 98. Unknown/ Refused	E2d. Will ask to demo at FSEC (1 to 5)? 1. Not at all likely ↓ 5. Very Likely 98. Unknown/ Refused	E2e. Will consider only rebate-qual. (1 to 5)? 1. Not at all likely ↓ 5. Very Likely 98. Unknown/ Refused	E2f. Will apply for rebate (1 to 5)? 1. Not at all likely ↓ 5. Very Likely 98. Unknown/ Refused
Oven, Convection	1					
" Combination	2					
" Single Rack	3					
" Double Rack	4					
" Conveyor	17					N/A
" Rotisserie	18					N/A
" Deck	19					N/A
" Tandori	20					N/A
Broiler, Underfired	21					N/A
" Overfired	22					N/A
Fryer	5					
" Large Vat	6			r /		
Steamer	7					
" Pressureless	8					
Steam Kettle	23					N/A
Rethermalizer	24	0		8		N/A
Rice Cooker	25	2				N/A
Pasta Cooker	26					N/A
Braising Pan	27					N/A
Wok	28					N/A
Range (Stove)	29					N/A
Range/Griddle Combo	30	2				N/A
Griddle, Single	31					
" Doublesided	32					N/A
Holding Cabinet, Insul.	10					
Dishwasher	33					N/A
Refrigerator, Glass Door	11		2			
" Solid-Door	12		2			
lce Machine, Tier II	14		2			
" Tier III	15		2			
Freezer, Solid-Door	13		2			
Kitchen Ventilation Control	16		2			
(Other, specify):	88					
(Don't know/Refused)	98					

	Start F Questions
	approximately what percentage of your equipment purchases do you typically request a stration at the FSEC?
	[RECORD RESPONSE 1-100%, 980=Don't Know/Refused.]
rebate-c to chang likely"?	ou were to learn that you were about to schedule a demonstration of equipment that is NOT qualifying and there were rebate-qualifying alternatives available, how likely would you be ge the equipment you wanted to see (where 1 means "not at all likely" and 5 means "very [RECORD RESPONSE 1 to 5, 98=Don't Know/Refused.]
	approximately what percentage of your FSEC visits were you handed a rebate application? [RECORD RESPONSE 1-100%, 98=Don't Know/Refused.]
	¥
demons	y y ng a scale of 1 to 5, how likely are you to make equipment purchases without requesting a stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.]
demons	stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.]
demons F5. Has	stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] s your business made any changes to your operational practices based on information during a visit to the FSEC?
demons F5. Has	stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.]
demons F5. Has learned	stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] a your business made any changes to your operational practices based on information during a visit to the FSEC? 1. Yes 2. No 3. Other
demons F5. Has learned	stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] your business made any changes to your operational practices based on information during a visit to the FSEC? 1. Yes 2. No
demons F5. Has learned	stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] s your business made any changes to your operational practices based on information during a visit to the FSEC? 1. Yes 2. No 3. Other 98. Don't Know/Refused.]
demons F5. Has learned	stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] a your business made any changes to your operational practices based on information during a visit to the FSEC? 1. Yes 2. No 3. Other 98. Don't Know/Refused.]
demons F5. Has learned	stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] s your business made any changes to your operational practices based on information during a visit to the FSEC? 1. Yes 2. No 3. Other 98. Don't Know/Refused.] F5a. Can you provide one or two examples, please? [RECORD RESPONSE.]
F5. Has learned	stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] syour business made any changes to your operational practices based on information during a visit to the FSEC? 1. Yes 2. No 3. Other 98. Don't Know/Refused.] Yes F5a. Can you provide one or two examples, please? [RECORD RESPONSE.] syour business made any changes to your maintenance practices based on information
F5. Has learned	<pre>stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] syour business made any changes to your operational practices based on information during a visit to the FSEC? 1. Yes 2. No 3. Other 98. Don't Know/Refused.] F5a. Can you provide one or two examples, please? [RECORD RESPONSE.] syour business made any changes to your maintenance practices based on information during a visit to the FSEC? 1. Yes</pre>
demons F5. Has learned F6. Has learned	<pre>stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] syour business made any changes to your operational practices based on information during a visit to the FSEC? 1. Yes 2. No 3. Other98. Don't Know/Refused.] F5a. Can you provide one or two examples, please? [RECORD RESPONSE.] syour business made any changes to your maintenance practices based on information during a visit to the FSEC? 1. Yes 2. No </pre>
demons F5. Has learned F6. Has learned	<pre>stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] syour business made any changes to your operational practices based on information during a visit to the FSEC? 1. Yes 2. No 3. Other 98. Don't Know/Refused.] F5a. Can you provide one or two examples, please? [RECORD RESPONSE.] syour business made any changes to your maintenance practices based on information during a visit to the FSEC? 1. Yes</pre>
demons F5. Has learned F6. Has learned	<pre>stration at the FSEC? [RECORD RESPONSE 1-5, 98=Don't Know/Refused.] syour business made any changes to your operational practices based on information during a visit to the FSEC? 1. Yes 2. No 3. Other98. Don't Know/Refused.] F5a. Can you provide one or two examples, please? [RECORD RESPONSE.] syour business made any changes to your maintenance practices based on information during a visit to the FSEC? 1. Yes 2. No 3. Other</pre>



11. Appendix C: Vendor Interview Guide

Vendors Interviewed	Type of Vendor
B&L Marketing Group	Marketing rep
Cambro Manufacturing	Manufacturer
Gina Galvan & Associates	Designer
Kitchen Professionals	Designer
Lund Lorio	Marketing rep
New Asia	Dealer
Preferred Marketing Group ¹²	Marketing rep
RW Smith	Designer
Star Restaurant	Dealer

¹² Two individuals were interviewed from PMG.

SoCalGas FSEC Demonstration Interview Guide for "Vendors" Target completes: 6 total (2 of each type of vendor)

Date:	
Company Name:	
Type of vendor:	
- Food service dealer	
- Marketing representative	
- Food service designer	
Contact Name:	
Title:	
Contact Phone:	
KEMA interviewer:	

A. INTRODUCTION

Hello, this is ______, calling from KEMA. May I please speak with [Contact Name]?

On behalf of the staff at The Gas Company, we are calling to do a follow-up study about your interactions with the Food Service Equipment Center. Melisa and Nicole at the Center recommended we contact you to help them evaluate the Center's influence on equipment purchasing decisions.

Are you familiar with the Food Service Demonstration Center?

[If not, ask to speak with the more appropriate person.] (With correct contact:) Name: ______ Title: _____ My questions will be about your interactions with the Food Service Equipment Center and will take about 20 minutes.

B. EXPERIENCE WITH FSEC

B1. First of all, can you briefly describe your role in bringing customers to the Food Service Equipment Center?

B2. What types of food service customers do you work with most?

- 1. Restaurants
- 2. Institutions (Schools, hospitals, correctional centers, etc)
- 3. Convention centers
- 4. Hotels
- 5. Food processing
- 6. Other. Specify_____

B3. On average, what percent of your customers attend a FSEC demonstration?

B4. What do you think are the most beneficial aspects of FSEC equipment demonstrations to customers? What about to your company?

B5. What percent of demonstrations do you think lead to a customer purchasing the equipment shown?

B6. When a customer comes to a presentation at the Center, how certain are they about what they want to purchase? (Do they usually know what they want to buy and just want to double-check, or do they often come in uncertain about what they want to buy?)

B7. What is the average lag time between a customer visiting the FSEC and actually purchasing equipment?

B8. Are you aware of any restaurants or food service companies that have changed purchasing specs, or O&M procedures as a result of visiting the FSEC? If yes, what percent?

Please describe a few instances...

C. KNOWLEDGE OF REBATE PROGRAM

- C1. Are you aware that SoCalGas offers rebates for certain qualifying food service equipment?1. Yes
 - 2. No [SKIP TO Section D]

C2. On a scale of 1 to 5, with 5 being very important and 1 being not important, how important do you think a rebate is to your customers, in selecting food service equipment?

C3. On average, what percent of your customers get rebates for equipment they purchased? If a customer buys a rebate qualifying equipment, how often do they actually go on to get a rebate?

C4. Do customers ask for your help with rebate applications? What kind of help do they typically need?

C5. What do you think are the biggest challenges that customers face in submitting a rebate application? (DO NOT READ)

- 1. Equipment not qualifying
- 2. Paperwork too onerous
- 3. Not aware of rebate program
- 4. Other...(specify:)

C6. Off the top of your head, can you name the types of food service equipment for which there are rebates available? (DO NOT READ)

Code Equipment		Yes, mentioned
1	Oven, Convection	
2	" Combination	
3	" Single Rack	
4	" Double Rack	
5	Fryer	
6	" Large Vat	
7	Steamer	
8	" Pressureless	
9	Griddle	
10	Holding Cabinet, Insulated	
11	Refrigerator, Glass Door	
12	" Solid-Door	
13	Freezer, Solid-Door	
14	Ice Machine, Tier II	
15	" Tier III	
16	Kitchen Ventilation Control	
88	(Other, specify):	
98	(Don't know/Refused)	

C6. Are there types of food service equipment that currently do not have rebates, for which you would like to see rebates for?

C7. What percent of the equipment that you sell, do you think would qualify for a rebate through SoCalGas?

C10. How do you typically get information about the Gas Company's rebate program for EE equipment? (Probe: Does it influence what you decide to sell or promote?)

D. IMPORTANCE OF ENERGY EFFICIENCY

D1. How often do you discuss energy efficiency with your customers? What do you discuss, or talk about?

D2. How often does the customer ask specifically about energy efficiency?

D3. Do you ever compare Btu consumption rates of different types of equipment with customers?

[Food Service Designers Only]

D4. When you work with your clients, do you ever estimate total annual gas consumption associated with different kitchen configurations and types of equipment? (Probe: How often?)

[All vendors]

D5. How do you typically learn about energy efficient food service equipment?

E. CONCLUSION

E1. How many times a year do you attend a FSEC demonstration?

So I have a question about where your customers actually install their equipment. E2. What percent of customers that you bring to the Center will install food service equipment in the SoCalGas service territory?

That's all the questions I have for today. Thanks very much for your help!