

SURE BET PROGRAM OFFERS COMPREHENSIVE SERVICES TO NONRESIDENTIAL SECTOR IN NEVADA

Karen Maoz, P.E., KEMA, Inc.

Karin Corfee, KEMA, Inc.

John Hargrove, Sierra Pacific Power Company

Introduction

Over the past 20 years, the Nevada Power Company (NPC) and the Sierra Pacific Power Company (SPPC) have offered several incentive programs aimed at reducing electric energy and demand. Efforts to offer such programs stalled in the late 90's due to regulatory constraints imposed on the utilities. After the regulatory issues were resolved in 2001, new energy efficiency programs were initiated to help reduce the strain on the electric grid in Nevada. In 2003, several new programs were developed in Nevada including the Sure Bet Program.

The primary objective of the Sure Bet Program is to cost-effectively achieve electrical energy and peak demand savings in the retrofit market of the nonresidential sector. The Sure Bet Program facilitates the implementation of cost-effective energy efficient measures in commercial, industrial and institutional facilities through a comprehensive incentive program and related technical assistance for energy efficiency services. Sure Bet targets all nonresidential NPC and SPPC customers and seeks to utilize contractors as the primary vehicle for marketing efforts. KEMA, Inc. is the program administrator for the Sure Bet Program and is responsible for program design, marketing and implementation of the program.

In 2004, the Sure Bet Program received national recognition from the Association of Energy Services Professionals (AESPP) with an award for Achievement in Energy Services. This award credited the Sure Bet Program with initiating a resurgence of utility-based demand-side management programs in Nevada.

The Sure Bet Program is unique because it offers comprehensive services for an extremely low price. The program is delivering savings at less than a cent per kWh saved on a levelized cost basis with a TRC above 2.0. This paper summarizes the unique aspects of the Sure Bet Program, discusses the retrofit incentive program structure, and compares its cost-effectiveness to similar nonresidential programs.

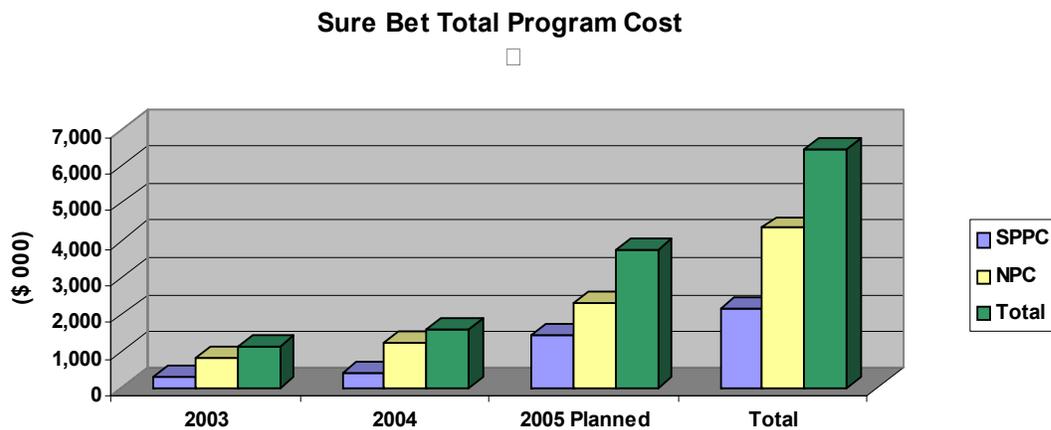
Program History

The Sure Bet Program was initially launched in 2003 as a pilot program that offered a simple incentive program including both prescriptive and custom components. The 2003 Sure Bet Program offered financial incentives to help mitigate the first cost associated with installing energy efficiency measures. In addition, the program offered full technical support services including energy audits, feasibility studies, project reviews and technology assessments. The level of service was based on customer need and potential for energy or peak demand savings. The initial program was designed to have relatively low incentive levels for both the prescriptive and custom measures set at approximately \$100/kW and \$.03/kWh saved. Some prescriptive measures such as high efficiency air conditioners were set at higher

costs per unit saved to bring down the payback period. Prescriptive incentives were offered for common measures such as lighting, cooling, vending machine controllers, and motors. Custom incentives were offered for all non-prescriptive measures that resulted in verifiable energy or peak demand savings.

Over the next two years, the Sure Bet Program built upon its successes and lessons learned from the previous program years to refine program design and expand program offerings. The Sure Bet Program expanded in 2004 to include building retro-commissioning case studies, distributed generation case studies, and a schools initiative. In 2005, the Sure Bet Program again modified service offerings to include a new construction program component that focused specifically on promoting energy efficient building design. As a result of expanding the Sure Bet Program to offer more comprehensive services, the program budget increased fairly significantly over the last three years. As displayed in the figure below, the Sure Bet Program has experienced more than a 300% increase in budget over from 2003 to 2005.

Figure 1. Sure Bet Program Budget Summary



Implementation Strategy and Key Features

It is important to develop strong relationships with all stakeholders when implementing a nonresidential energy efficiency program. Besides introducing a traditional incentive program, the Sure Bet Program provides a full array of technical services directed at multiple market segments and market actors. Customers are not the only focus of the program. Contractors, the utility Major Account Executives (MAEs) and other trade allies are of equal importance when trying to build momentum and the Sure Bet brand name. Customer service is a top priority for the Sure Bet team, not just for the utility customers but also for the contractors, MAEs and other trade allies. Therefore, KEMA focuses on developing partnerships with contractors, MAEs and trade allies to leverage marketing and outreach capabilities. KEMA works diligently with the utility’s Major Account Executives (MAEs) to leverage their relationships with the utility’s largest customers to provide value added services. The MAEs promote the Sure Bet Program because it helps them better serve their accounts. Developing strong relationships with all of these stakeholders – customers, contractors, MAEs and trade allies - is an important priority that helps make the Sure Bet Program a success.

Overview

The Sure Bet Program is a \$3.75 million program in 2005. The program offers the following program components:

- Sure Bet Incentives and energy audits
- Sure Bet Building Optimization services
- Sure Bet for Schools
- Sure Bet New Construction Design Assistance.

Under the Sure Bet Incentive Program, both prescriptive and custom incentives are offered to provide customers with maximum flexibility to receive incentives for most types of energy-saving retrofits. KEMA determined prescriptive incentive levels through rough budget guidelines, market research and analysis of Nevada climate data and cost effectiveness modeling. KEMA's experience in similar energy efficiency programs also contributed to the program's design, maximizing energy savings and peak demand reduction for the utilities while continuing to encourage customer participation. Our goal was to have prescriptive incentive levels that offered attractive payback periods, between 1 and 2 years on average, yet for measures with higher capital costs such as high efficiency air conditioning units, we fell short of this goal.

Both prescriptive and custom incentives are offered under the Sure Bet Program. Prescriptive incentives are offered for common energy-saving retrofits (lighting, cooling, high-efficiency motors, refrigeration, agriculture irrigation, and miscellaneous measures). Under the prescriptive program, a simplified process expedites application reviews and approvals for a more cost-effective program. Custom incentives are offered at \$.03/kWh and \$100/kW for all measures not included under the prescriptive program, provided that the project can demonstrate verifiable energy and/or peak demand savings. The custom incentive process is slightly more complicated than the prescriptive process, as energy savings calculations have to be provided with the application to support the energy and demand savings. KEMA evaluates the savings estimates of every project and conducts monitoring or modeling to verify savings estimates on custom projects, if appropriate. KEMA also provides assistance to customers in developing the savings estimates, if technical support is required.

The Sure Bet Program process encourages all applicants to submit a pre-notification application for all types of projects so that customer eligibility, incentive calculations and funding can be verified. Once pre-approved, incentive funds are reserved for a 90 day period and projects are expected to be complete within this period. Pre-notification is required for all incentives over a \$7,500 and has to be submitted at least 14 days in advance of measure installation. This process is designed to protect both the customer and KEMA, in that the customer knows what to expect in terms of incentive dollars, and KEMA can effectively budget for expected payments throughout the program year.

The Sure Bet Program also has project caps and customer caps. The Sure Bet team and the utility MAEs determined the caps in each territory when the program was initially launched in 2003. At that time, the overriding concern was that the funding was limited and project/customer caps had to be imposed to prevent a handful of large customers from receiving the bulk of the incentive funds. Table 1 shows the program incentive caps by territory in 2005 (values in parentheses were the incentive caps prior to August 2005). As displayed, the NPC project and customer caps were raised in 2005 in NPC territory from \$15,000 to \$30,000 per facility or campus and from \$40,000 to \$100,000 for the customer cap (based on tax payer ID number). This change occurred as a result of program funding increasing

significantly in 2005 and the lack of ability to fully subscribe the program at the pre-existing project/customer caps.

Table 1. 2005 Sure Bet Program Incentive Caps

	Facility/Campus Cap	Customer Cap
NPC Customers	\$30,000 (\$15,000)	\$100,000 (\$40,000)
SPPC Customers	\$10,000	\$10,000

KEMA pre-inspects many of the large projects for verification purposes. Inspection criteria may include contractor participation rate, type of measure, and incentive amount. When the installation is complete, the customer submits a final application, identifying the measures installed along with all documentation. To reduce the number of documents used for Sure Bet, the application form served as a template for both pre-notification and final applications. KEMA conducts post-inspections on a case-by-case basis.

The primary governing document of the Sure Bet Program is the Sure Bet Policies and Procedures (P&P) document. The Sure Bet P&P details key program dates, customer and project eligibility criteria, incentive amounts, and incentive caps. In addition, the document describes the program process and equipment specifications and defined key terms used in the program documents. The P&P is updated on an as-needed basis and is available for reference or download on the program website.

KEMA developed a Sure Bet Program application-tracking database to serve as an electronic record of all of the information included on the applications. This includes applicant and third-party information, incentive calculations, application status, inspection results, and a contact log. The information from the database is primarily used to generate queries for reporting purposes and to provide insight into the program progress, but also acted as an efficient tool for internal communication, filing, and file sharing.

Marketing Summary

In 2005, KEMA was able to build upon the momentum of Sure Bet in 2003 and 2004 by reaching out to previously participating contractors and by building a backlog of potential projects once funding was exhausted in the previous program year. By focusing on contractors, vendors, equipment distributors, and other supply-side actors, KEMA continued to reach out and expand on previous success in working with their respective client bases as well as through customer success stories that were circulated throughout the NPC and SPPC commercial customer networks. In addition, for the New Construction program component, KEMA had to focus marketing efforts on Architectural and Engineering firms.

KEMA's objective is to continue to foster new relationships with potential contractors and to increase the visibility of program successes within the utility electric customer communities. KEMA also participates in Chamber of Commerce events and contributes to articles in journals and the utilities' internal newsletters. KEMA seized several opportunities to present the Sure Bet Program to both supply-side actors and end-users throughout the program year.

KEMA developed several marketing pieces for ongoing promotion of the Sure Bet Program, including success stories, fact sheets, a tri-fold brochure, and bill inserts. KEMA also made it a point to educate

the utility representatives on the Sure Bet Program so that they could promote it through their day-to-day interactions with customers and contractors throughout Nevada. KEMA also worked to increase the visibility of the Sure Bet Program through several marketing events and meetings in Nevada.

The MAEs have been very effective in promoting the Sure Bet Program to the large customers. KEMA has been working with the MAEs to create as seamless a process as possible in dealing with these important utility customers. KEMA personnel held several meetings with the MAEs to educate them on the Sure Bet Program and to garner their input and expertise.

KEMA held contractor-training seminars in Las Vegas and Reno to formally kick off every program year. The primary targets for the seminars were contractors, and the objectives were to educate attendees about the Sure Bet Program policies and procedures, review technical aspects of energy efficiency, and summarize the application process. Based on our tracking system, many participating contractors attended the training seminars. KEMA also provided contractors with the tools (case studies, fact sheets, tidbits on energy efficiency, technical services, and incentives) to promote and incentivize energy efficiency to their current and potential clients. These tools were valuable because Nevada is relatively new to energy efficiency. Marketing to contractors was and is the most important source of projects under the incentive program. Contractors are typically better at selling their trade than program staff and benefit from adding value to their proposals by including information financial incentives and energy cost savings.

Website

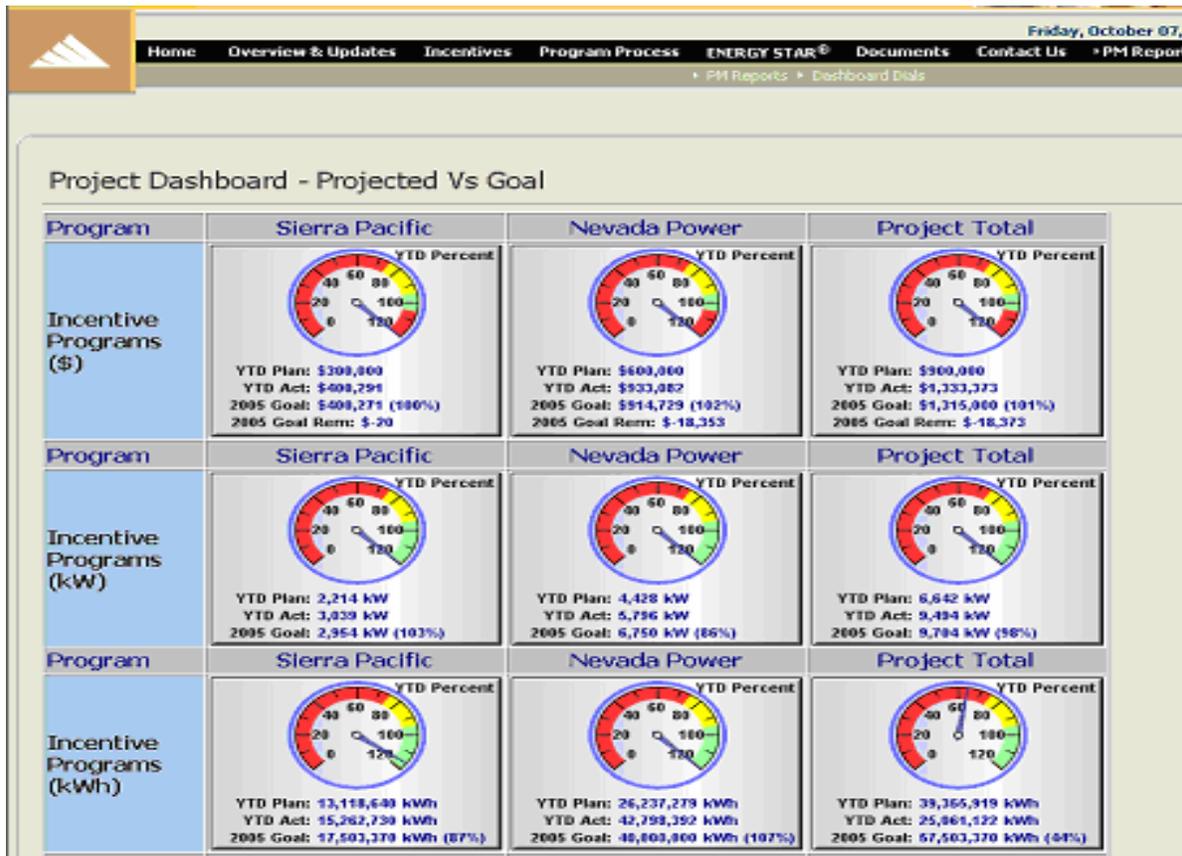
The website is another tool used for program implementation. The website is a valuable form of communication to all parties. Customers and contractors can find all program information and contacts via the website. The website also provides educational materials and any information or data that have been shared with others, such as fact sheets and funding status. Contractors are keen to keeping up to date on the availability of funds. Several unique features of the website include:

- Look and feel of utility colors and logos
- Program manager's page including real-time dashboard, project management reports, tracking database, as well as funding status and progress towards achieving goals for kW and kWh savings
- Application forms in both Excel and Adobe Acrobat versions
- Marketing materials for contractors, including success stories, fact sheets, and brochures
- ENERGY STAR information, including PC Power Management downloadable software
- Lists of contractors trained by KEMA on the program policies and procedures
- Links to NPC, SPPC, and the Take Control website.

During a 6-month period, the website had over 400 hits per month (including almost 300 hits per month on the incentive applications page). These data suggest that the website has been a significant tool in terms of both marketing and managing the Sure Bet Program. There were, on average, 10 hits to the PC Power Management page alone over this same period. The Sure Bet team has encouraged customers to utilize this ENERGY STAR program offering.

One aspect of the website that has proven to be quite effective is the Program Manager's page, which allows the utility to review real-time program data, resulting in the ability to manage resources more effectively. A screenshot of the dashboard is provided in Figure 2.

Figure 2. Sure Bet Program Dashboard



The dashboard has been instrumental in helping Nevada Power and Sierra Pacific Power management sell the Sure Bet Program to senior executives, thereby resulting in additional funding for Sure Bet Programs.

Decision Support Services

KEMA's technical expertise in demand-side management provides contractors, supply-side actors, and utility customers with different levels of support in attaining the Sure Bet Program goals of increasing energy savings and reducing peak demand. KEMA staff provided technical support in the following ways:

- **Comprehensive audits:** A thorough investigation of a facility's energy uses identifies potentially cost-effective energy saving measures. These measures included anything from lighting or HVAC efficiency upgrades to fixing air compressor leaks or replacing low-efficiency motors. These audits required engineering analyses and savings estimates of the proposed energy-efficiency measures. The deliverable was a complete report with energy-saving calculations, assumptions, and simple payback scenarios.
- **Screening assessments:** The purpose of the screening assessments was to help the utility customer to identify the potential for energy savings and to aid the customer in completing a Sure Bet application if necessary. KEMA developed a screening tool, essentially a checklist form for on-site evaluation of the potential for a customer (business), to aid in the identification of cost-effective energy-efficiency measures. The screening assessments included interviewing the

site contact, surveying the existing equipment, noting operation of equipment and facility, and recommending next steps. In some cases, the deliverable was a completed screening assessment form and report by KEMA for delivery to the customer, while in other cases the deliverable was simply a completed application for the customer.

- ***Custom energy savings analyses:*** These consisted of a service offering to aid the customer and/or contractor in determining the energy and peak demand savings that would potentially result from an energy saving retrofit. KEMA typically provided an informal report with assumptions and savings estimates to the customer. KEMA used these results for program savings estimates and for calculating the incentive amounts for the customer's incentive application.
- ***Proposal reviews:*** The objective of KEMA's proposal reviews was to assist the utility customer and/or contractor to determine the savings and, subsequently, the cost-effectiveness of a proposed project. . Proposal reviews were used primarily on the front end of a project to provide the customer with an independent opinion of the viability of a project. In some situations, the proposal reviews were also used on the back end of a project to develop savings estimates for the Sure Bet incentives.
- ***Inspections:*** Inspections were primarily performed to verify project and customer eligibility and to ensure that projects were being completed in compliance with the Sure Bet Program P&P. However, a secondary yet equally important role of the inspections was to help complete applications and offer advice as to additional ways customers could save energy at their facilities.

Growing the Sure Bet Brand

The nonresidential stakeholders in Nevada are starting to associate the Sure Bet brand name with energy efficiency. KEMA and the utilities have been expanding the services offered under Sure Bet. Aside from the traditional incentive program, these services provide unique opportunities to the customers and contractors.

2004 Retro-Commissioning Projects

The 2004 Sure Bet Retro-Commissioning (RCx) Program component focused on conducting case studies of large buildings with control systems. The demonstration projects were designed to optimize existing controls with respect to usage and energy efficiency to educate facility and property managers, administrators, business managers, and building owners on the benefits of building commissioning. Additionally, the program offered specific commissioning assistance and limited funding for programming and/or minor repairs for selected customers. The 2005 Program incorporated similar ideas into a Building Optimization Assistance Program.

The long-term objective was to learn from projects and to expand the idea the RCx program component into a more comprehensive program, with additional marketing and outreach activities to increase customer awareness of building commissioning as a cost-effective energy efficiency measure. The case studies for 2004 will be utilized in future years for marketing purposes and to provide the cost justification for increasing incentive funding for future building commissioning projects.

2004 Distributed Generation Projects

The 2004 Sure Bet Distributed Generation (DG) Program component targeted both pre-existing or newly installed DG projects and feasibility assessments for potential customers. KEMA worked with a company in Nevada to put a case study together on a 250 kW photovoltaic system. The case study focused on the economics of owning and operating a DG system. The other case study was feasibility study to evaluate all viable DG options and compare the economics of each option with respect to the specific load characteristics and objectives of the site. Cost-effectiveness of the viable DG system options was determined by comparing the DG cost of electricity to the electricity price from the grid.

2005 Expanded Programs

In 2005, the RCx program evolved to a Building Optimization Assistance (BOA) Program. This program offers services to all customer sizes in order to optimize existing commercial building operations with respect to energy usage. The program can focus on built-up systems or a building with a simple HVAC design. KEMA provides a combination of commissioning, energy auditing, and education activities for the customer. Funding is available for low-cost/no-cost improvements such as control programming, minor repairs, or system tune-ups.

The Sure Bet Program also provides a New Construction (NC) Program. The NC Program is a design assistance program. KEMA meets with the NC team early in the design process to help the team develop energy-efficient design concepts through technical guidance and education on best practices. The objective of the program is to promote investments in energy-efficient design strategies that result in long-term energy savings and potential market effects. KEMA leads the team to consider a change in design that would make the building/system more efficient. The program has funding to enable developers to study and implement energy efficiency. Many of the projects involve consultation on energy points to support LEED certification.

One other very exciting aspect of the Sure Bet Program is its collaboration with the Nevada school districts to identify and implement energy efficiency opportunities. Funding is available for new construction or retrofit projects, education, technology studies, and process improvements. Southern Nevada, in particular, has one of the fastest growing school districts in the country, Clark County. The Sure Bet Team met with Clark County officials to discuss priorities for the year. KEMA is working with the county to provide a variety of services including:

- Technology reviews on an as-needed basis
- Cooling tower water treatment techniques
- Energy-efficient portables
- Preventive maintenance as an energy-saving strategy
- Lighting demonstration projects
- Energy management system project.

For the Northern Nevada school districts, the Sure Bet Team is working with thirteen school districts, handling several interests and priorities. Nineteen projects have been funded in 2005 for involving measures such as lighting (HID to T5s, T12s to T8s), EMS system upgrades, motion sensor controls and VFDs. The school districts now have increased awareness about energy efficiency and look to the Sure Bet team for technical support and consultation. To date, they have had no money for such investments.

When it comes time to replace broken equipment, they would consider purchasing more efficient equipment if the money were available. The Sure Bet Program has helped educate the districts, and they are looking forward to an ongoing relationship.

The expanded programs required new marketing strategies and approaches. In each case, KEMA developed a unique marketing plan to successfully implement the non-incentive program components. For the Schools Program, the Sure Bet team met with the school districts to encourage participation in the Sure Bet Schools Program. KEMA followed-up throughout the year to ensure that proposed projects were progressing in a timely manner. For the New Construction Program, KEMA promoted the program through Architectural and Engineering firms. The Building Optimization Program was promoted primarily through outreach with the MAEs.

Program Results

The Sure Bet Program fully subscribed the first two program years and is expected to do the same for 2005. In addition, the program has exceeded its expectations in energy and peak demand savings. Most importantly, KEMA has not experienced any customer complaints. As stated previously, customer service is one of the most important objectives of the program.

Table 2 illustrates the program's cumulative goals and actual accomplishments for energy and peak demand savings for 2003 and 2004 for a total of 420 projects. Table 3 displays the statistics for the 2005 program to date for 235 participants.

Table 2. Cumulative Energy and Demand Savings vs. Goals (2003-2004)

	TOTALS		
Category	Goals	Results	Results vs. Goals
Demand Savings (kW)	9,158	11,722	128%
Energy Savings (kWh)	33,536,184	70,518,466	210%

Table 3. Energy and Demand Projected Savings vs. Goals for 2005

	TOTALS		
Category (October 24, 2005)	Goals	Projected Results*	Projected vs. Goals
Demand Savings (kW)	9,704	9,728	100%
Energy Savings (kWh)	57,503,370	61,622,213	107%

* Projected Savings for 2005 based on applications received.

KEMA attempts to collect as much information as necessary to help track programs while ensuring that program applications are still simple for the customer. With this information, we are able to collect information to help improve the program and to understand who is participating in the program. Some interesting facts about the program are that, over time, a more diverse mix of measures is being implemented. In 2003, over 90 percent of the incentives went to lighting measures. In 2004 and 2005, lighting only accounts for about 40 percent of the incentives subscribed. Cooling and custom measures are building momentum and are receiving a greater percentage of the funding each year. This is a testament to the fact that we were able to partner with a more diverse group of contractors, ultimately leading to the expansion of our potential customer base as a result.

It is common for projects to be cancelled in incentive programs designed for the retrofit market for a variety of reasons. Some of the most common reasons include:

- Inability to complete project in the eligible timeframe (calendar year)
- Lack of internal funding for the measure
- Change in customer management
- Customer/measures do not meet eligibility requirements
- Lack of verifiable savings.

It is difficult to estimate how many projects will become inactive before the end of the program and how to manage the losses. Approximately 15 percent of the applications received in 2004 were cancelled, down from 19 percent in 2003. So far in 2005, there have been 21 cancellations, less than 10 percent of applications. KEMA expects more cancellations as the project installation deadline approaches. In anticipation of projects being cancelled toward the end of the program year, KEMA tries to oversubscribe the program funding by approximately 10 to 20 percent in each service territory. This method was successful in 2004 and is being used in 2005. To date, the 2005 program is fully subscribed and new applications are being placed on a waitlist.

KEMA strives to work with all customers to encourage project completion and adherence to the program P&P. In 2004, projects that were cancelled in 2003 due to the customer's inability to complete them on time were reviewed. KEMA worked with several of those customers to facilitate the completion of their projects in 2004. Similarly, customers that dropped out of the 2004 program were contacted to see if they were viable projects for 2005.

With the addition of large (>1 MW demand) customers in 2004, the MAEs at both NPC and SPPC naturally assumed an integral role in Sure Bet. They not only helped in marketing the program to their customers, but also aided in facilitating project completion. Approximately 65 percent and 45 percent of the total projects completed involved utility major accounts in 2004 and 2005, respectively. However, it is important to note that 77 percent of the projects completed involved small customers (< 1MW demand) in both 2004 and 2005, which means that we are still serving the important objective of reaching small commercial customers.

Participating Contractors

Contractors are one of the primary vehicles for marketing the Sure Bet Program and delivering it to the utilities' customers. For this reason, we have paid close attention to all participating contractors and strive to maintain a close relationship with them so as to continue to build momentum in the program. We interact with contractors on a regular basis and work to build on the partnership and trust that we have created through the successful completion of Sure Bet projects. In addition, the Sure Bet Team helps to educate contractors on energy-efficiency techniques and measures to create a lasting effect on the industry beyond the Sure Bet Program.

To further develop and maintain this relationship with contractors, KEMA decided to track additional data on all contractors that participated in 2004 and 2005 through the inclusion of a contractor section in the Sure Bet application forms. Some key points regarding this data are important to note:

- Sixty-one percent of the total projects involved a contractor/third party in 2004 and 77 percent in 2005.
- Of the 108 projects in 2004 that involved a contractor, 63 different contracting firms were utilized. In 2005 to date, 182 projects involve a contractor with 86 different contracting firms.

Lessons Learned

Although the Sure Bet Program is clearly a success, there are always both positive and negative lessons to be learned. Two important aspects that need improvement are to avoid selling out the program mid-year as happened in 2003 and 2004 and to reduce paperwork for the participants. Program year 2005 sold out in the beginning of the last quarter, an improvement most likely attributable to increased funding levels. To reduce paperwork, KEMA makes changes throughout the year to accomplish this goal. Several key lessons learned are:

- *Supply-side actors can be effectively leveraged for marketing and outreach support:* Marketing to lighting and HVAC contractors and equipment suppliers proved to be an extremely effective strategy. Through successful networking, KEMA was able to successfully leverage the sales forces of several third-party contractors who were quite active in promoting our program to their clients.
- *Contractor seminars proved to be effective marketing strategy:* KEMA conducted contractor training workshops in both Reno and Las Vegas to educate contractors (and a few end-users) about Sure Bet and to kick off each program year. Prior to the workshops, a mailing was made to recruit attendees and to re-invite those contractors that attended in previous years. The workshops again proved to be an extremely effective method of recruiting contractors to participate in the program, as at least one out of every four who attended participated in Sure Bet in 2004.

- *Direct mailings were marginally successful:* Direct mailings, consisting of flyers, brochures, and Sure Bet packets represented a minor portion of KEMA's marketing efforts. Although the number of contractors and/or customers who learned of the program through the direct-mail marketing was not tracked, we suspect that the direct-mail marketing was only marginally successful in recruiting participation. Nonetheless, direct-mail campaigns are inexpensive relative to other marketing strategies and should be included as a strategy under most marketing campaigns.
- *MAEs are an effective marketing tool for recruiting large commercial customers:* The MAEs were an important tool in marketing Sure Bet to large commercial customers and facilitating project completion. The MAEs introduced most of these customers to the Sure Bet Program and aided the Sure Bet Team in the application process by helping with inspections and gathering customer data and project documentation.
- *Including large commercial customers did not prevent the program from reaching the small commercial customer segment:* Initially, the Sure Bet Program Team was concerned that most of the customers benefiting would be large. However, small (< 1MW demand) commercial customers continued to represent the majority (77 percent) of the total projects completed during the 2004 and 2005 program years (for 200, active projects to date). Only small customers were allowed to participate in 2003. This shows that Sure Bet continued to serve the objective of reaching the small commercial customer segment in Nevada.
- *Tracking contractor information showed that a diverse group of contracting firms participate in the program:* KEMA improved upon its ability to track contractor data in 2004. The results were promising, showing that 61 percent of the total projects completed involved a contractor. Also, of the 108 projects that utilized a contractor for their retrofits, 63 different contracting firms were represented in the 2004 Sure Bet Program. In 2005, of all the active applications, 77 percent involve a contractor. Of these 182 projects, 86 different firms are represented. These numbers are very positive in that they show that if relationships are maintained with contractors and this program is developed into a more efficient tool for their use, there will be an increase in projects from additional firms in the future. Also, only 25 percent of the contracting firms that attended the Sure Bet Contractor Workshops participated in the program in 2004. That means that there are many more contractors that are interested in the program that have yet to take advantage of its benefits.
- *The ability to oversubscribe incentive funding minimized the impact of project cancellations towards the end of the year:* Being afforded the ability to oversubscribe incentive funding beyond the budgeted amount allowed KEMA to better manage the incentive program towards the end of the program year. It is common for customers to reserve incentive funding for projects that will eventually be cancelled for one reason or another without the knowledge of the Sure Bet Team. This makes it very difficult to reach program energy and demand savings goals and to spend the entire incentive budget. In 2004, each service territory was oversubscribed by approximately 20 percent (approximately the rate of cancellation in 2003), with the expectation that some of the projects would drop out prior to the end of the year. For this reason, very few incentive dollars went unspent in 2004 and it effectively reduced the need for last minute marketing efforts to make up for the lost projects.
- *Cancelled projects from the previous year can result in successful projects in subsequent program years:* It is common for projects to be cancelled in incentive programs such as Sure Bet, and as

expected, we have seen a large number of cancellations in the past, historically approximately 20 percent of the total applications received. More importantly, KEMA was able to go back and work with customers that had projects cancelled in 2003 to ensure that they were completed successfully in 2004.

- *Low administrative costs can be achieved through economies of scale and programs that span multiple years:* Lower administrative costs can be achieved through economies of scale as program budgets increase in size. Additionally, there are benefits associated with running a multi-year program, as the base of the program design and components have already been established and program momentum has been achieved. In addition, the marketing costs for a multi-year program typically are lower than for single-year programs. This effect can be seen in KEMA's increasing the incentive/administration cost ratio from 2003 to 2004 and now into 2005.
- *Technical support is a key program component:* A greater emphasis on education and technical support was required for smaller projects. The telephone hotline and website proved to be effective customer support tools that were heavily used by prospective applicants. However, many of the smaller customers or third-party contractors did not know how to do the savings calculations that were required with the application. Engineers were available to provide support via telephone and/or e-mail, especially for those customers that required a custom analysis. In addition, during the inspection process, the technical staff was able to provide in-person assistance to customers, particularly in identifying site-specific energy-saving measures, filling out application forms, and providing aid in savings analyses.
- *Aggregation of projects helped to reduce hassle and market barriers:* The Sure Bet Program allowed multiple projects located within a service territory to be aggregated into a single application. This decreased the amount of paperwork required for a more efficient application process. This also proved useful by helping third-party contractors to get projects started. As a result of this program feature, the Sure Bet Program was successful in recruiting the participation of retail chains, school systems, and government organizations with multiple project sites throughout Nevada.
- *Anticipate the need for increased resources immediately following an application deadline:* The application deadline served as a strong incentive for program participants to complete and submit their applications. The influx of applications increased significantly at selected deadlines throughout the program, including the changing incentive amounts of August 1, the prenotification deadline of December 1, and the final application deadline of December 31. The large influx of applications just before these deadlines was more than the staff could process. On future programs, the resource plan should include additional staffing immediately following an application deadline period. All applications for Sure Bet were date stamped to ensure that they were processed in the order they were received.

Program Comparison

The Nevada Sure Bet Program is a cost-effective program for the Nevada utilities and is comparable to similar programs. However, comparing programs' cost-effectiveness is difficult since no two programs are identical. Additionally, each utility has its own way of calculating cost-effectiveness, which can

depend on discount rates, cost of purchasing electricity, and the cost of electricity to the consumer.

Some common metrics are:

- Percentage of total program budget allocated to incentives
- Dollar per kW saved
- Dollar per first-year kWh saved

KEMA compared this program to California utilities since the program data is publicly available, and many programs are well established. It was expected that once a program is off the ground, costs can be reduced due to the momentum of program information dissemination, i.e., reduced marketing and economies of scale. Table 3 provides a comparison of several energy efficiency programs with similar service offerings.

Table 3. 2004 Program Comparison.

Program Name	Approved Budget (\$000)	Energy Reduction Targets (MWh)	Demand Reduction Targets (kW)	Program Admin	Audit/ Tech Support	Target Customer Class	Notes
PG&E / Local	\$7,110	14,402	3,108	IOU	Y	Nonresidential and Residential	Education/Outreach, direct install
Energy Savers	\$5,573	16,754	4,525	3rd Party	Y	Small Nonresidential	Facility assessments included
Express Efficiency	\$35,664	499,251	93,961	IOU	N	Nonresidential (<500 kW)	Statewide program in CA. No facility assessments
Sure Bet	\$1,410*	24,062	6,000	IOU	Y	Nonresidential	Facility assessments, tech support
SPC	\$53,991	296,423	38,803	IOU	N	Nonresidential (~> 500 kW)	Statewide program in CA. Monitoring required
BEST	\$4,395	17,422	4,563	3rd Party	Y	Nonresidential (< 100 kW)	Contractor driven, Internet based software tool

* Does not include non-incentive program components (retro-commissioning and distributed generation).

The two programs most similar to the Sure Bet Program are California’s statewide Express Efficiency, a prescriptive program, and the Standard Performance Contract Program, a calculated and custom program. Both programs have been in operation since 1999. They are both large-scale programs targeted to customers larger than 500 kW that do not offer customers technical assistance or other services. The other three programs target small nonresidential customers and offer comprehensive services similar to the Sure Bet Program. All California program information is publicly available on the California Public Utilities Commission website (www.cpuc.gov). It is important to note that the non-IOU programs do not include the IOU administration costs while the Sure Bet Program, Express Efficiency and SPC include these costs. The following three graphs compare the three programs by the metrics proposed.

Figure 3. Incentives versus Proposed Budget.

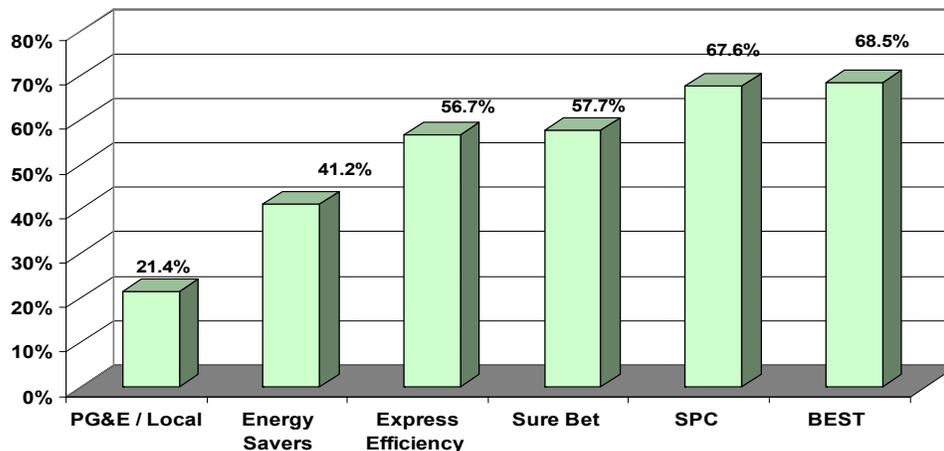


Figure 4. Program Cost per kW Saved.

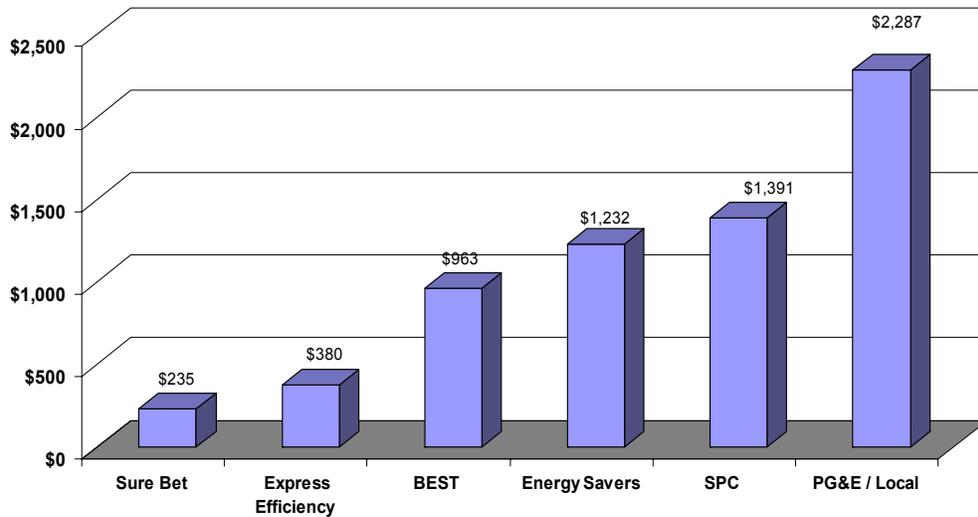


Figure 5. Program Cost per First Year kWh Saved.

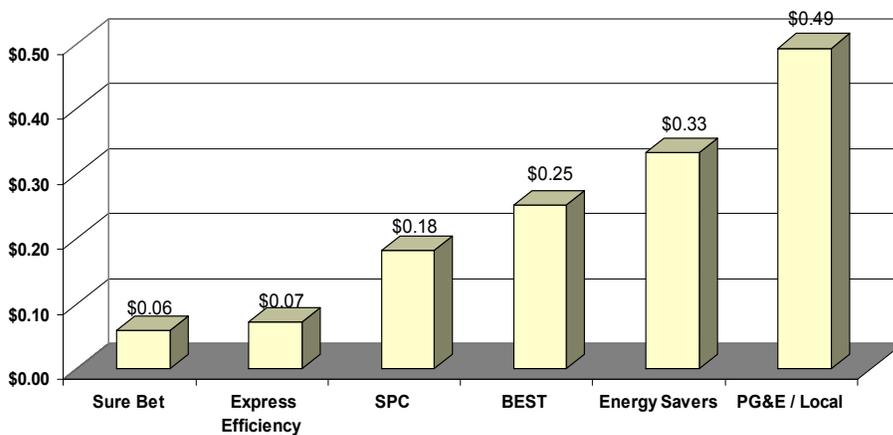


Table 4 includes cost-effectiveness metrics for the Sure Bet Programs. For 2003 and 2004 actual year-end data is provided. For 2005, the incentives and kW and kWh savings are projected.

Table 4. Sure Bet 2003-2005 Cost Effectiveness (Based on Goals)*.

Program Year	Total Budget	Incentives	kW	kWh	Incentives, % of Total Budget	\$/kW	\$/First year kWh
2003	\$977,314	\$577,314	3,919	20,152,000	59%	\$249	\$0.05
2004**	\$1,453,160	\$856,160	7,801	50,354,223	59%	\$186	\$0.03
2005	\$2,198,250	\$1,315,000	9,728	61,622,213	60%	\$225	\$0.04

* Budget does not include non-incentive program budget (retro-commissioning, distributed generation, building optimization, schools, and new construction). ** Savings high due to large LED signage projects.

On a levelized cost basis, the Sure Bet Program is extremely cost-effective. The comprehensive suite of services and program components under the Sure Bet Program costs less than one cent per levelized kWh saved (<\$.01/kWh) - almost too cheap to meter.