

Nonresidential Direct Installation

1. Projected Program Budget	\$	49,642,987
2. Projected Program Impacts		
MWh		303,970
MW (Summer Peak)		55.11
3. Program Cost Effectiveness		
TRC		3.47
PAC		3.38

4. Program Descriptors

Market Sector: Nonresidential
Program Classification: Local Program
Program Status: Revised Existing

5. Program Statement

Small businesses provide a significant source of historically untapped potential for energy efficiency. Limited capital resources, lack of acceptance of the magnitude of the personal financial benefits of energy efficiency improvements and generally high discount rates for financial decisions are the primary barriers to participation. In addition, the majority of these customers occupy short-term leased facilities. Consequently, there is also a split incentive barrier to adoption of energy efficiency improvements. The Nonresidential Direct Installation program addresses these barriers by providing no-cost energy efficient retrofits and, beginning in 2006, on-bill financing.

The Nonresidential Direct Installation program delivers energy efficient hardware retrofits through installation contractors that offer turnkey partnerships with local governments, Community Based Organizations (CBOs), Faith Based Organizations (FBOs), and other selected organizations.

The targeted audience is very small and small commercial/industrial businesses in SCE's service territory. Eligible customers are defined as very small commercial customers with a monthly peak demand equal to or less than 19 kW; small commercial customers with a monthly peak demand between 20 kW up to 100 kW; and small commercial customers with a location-aggregated monthly demand of less than 100 kW. Small business customers located in

What's New for 2006-08?

- Innovation
 - Pilot On Bill Financing option as a means to encourage greater adoption of energy efficiency
 - Implement youth job creation in economically-challenged areas
- Integration
 - Provide demand response opportunities to small businesses
- Other Program Improvements
 - Promote energy efficient refrigeration

rural communities will also be targeted for enrollment in the Nonresidential Direct Installation program. SCE will partner with CBOs/FBOs and already-existing city partnerships to ensure participation from rural zip code customers.

Innovation

During 2006-08, SCE will pilot an on-bill financing option to approximately 300 qualified small commercial customers with a monthly demand peak of over 50 kW, but less than 100 kW.

The program will provide zero

The program will provide zero interest financing for select lighting and refrigeration retrofits. This on-bill financing pilot offers an innovative combination of loan and incentive to strengthen customers' partnership in energy efficiency.

interest financing for select lighting, refrigeration, and air conditioning retrofits. This pilot will offer a combination of loan and incentive to cover the total cost of adding or replacing equipment. Combining a no interest loan with an incentive will lower the financial hurdle customer's must overcome to participate in the program. In addition, revolving PGC funds should increase the reach of the program by spreading the same loan dollars to additional customers as funds are repaid.

Eligible customers will be reached through a combination of direct outreach by contractors and SCE's customer representatives. Contractors will be able to enroll, offer free audits, and provide for the direct installation of energy efficiency retrofits for small commercial customers. Based on market research of the on-bill financing participants in 2006, the pilot may expanded to other types of small business customers. For example, government and school segments with a monthly demand peak of over 50 kW, but less than 200 kW may also be targeted as candidates for the on-bill financing offering beginning in 2007 and 2008.

Integration

An element of the program's design is to leverage the door-to-door delivery mechanism. The program's primary contractors and CBO/FBOs will deliver both energy efficiency and demand response program information. This approach will provide integrated program outreach and marketing to support energy efficiency and demand reduction objectives. Information on demand response programs listed below will be promoted:

- Summer Discount Program
- CPA Demand Reserves Partnerships
- Demand Bidding Program
- Scheduled Load Reduction Program
- SCE EnergySmart Thermostat Program

Other Program Improvements

The Nonresidential Direct Installation program will also work collectively with SCE's Local Government Partnerships program to deliver a combined approach to energy efficiency. This approach will enhance and strengthen the energy efficiency offerings

through partnerships among SCE, local governments, and other entities. Customers benefit not only from the Nonresidential Direct Installation program, which includes energy audits and the direct installation of energy efficient equipment, but also from seminars, workshops, and customer education resulting from all SCE programs they are qualified to enroll and participate in to reduce energy use and save money.

The 2006-2008 Direct Installation program will have two Primary Contractors as implementor. One Primary Contractor will have the responsibility of working with SCE's Local Government Partnerships and implement the program in regionally remote areas of SCE's service territory such as Ridgecrest, Blythe, and Tehachapi. The first Primary Contractor will work in selected remote cities to assist customers with little access to energy efficiency programs and participating contractors.

The second Primary Contractor will implement the program in Santa Barbara County and selected cities in the Los Angeles County basin working with CBO/FBOs. Since CBO/FBOs are predominantly located in urban areas in the Los Angeles basin, the second Primary Contractor will be focused on working with selected CBO/FBOs in economically disadvantaged areas for job creations and development. Additionally, the second Primary Contractor will also work with the Santa Barbara Partnership in implementing the program.

6. Program Rationale

The most likely alternative to a direct installation program would be a prescriptive form of rebate program. Prescriptive programs (like Express Efficiency) allow for simple participation. However, the primary barriers to participation for very small and small commercial customers are lack of available capital and generally high interest rates for financial loans. Only direct installation programs that provide for the entire cost of measures address these barriers.

To achieve greater long-term energy reduction, SCE will include lighting and selected refrigeration maintenance measures in the program. HVAC package units, including package terminal units, will be included in the Nonresidential Upstream HVAC program for 2006-08 and measures such as variable frequency drives will be included in the 2006-08 Express Efficiency program.

The 2004 Energy Efficiency Potential Estimates conducted by Kema-Xenergy for SCE shows potential savings of 58% in indoor lighting, 19% in refrigeration and 13% in cooling. HVAC measures are being addressed and included in the Comprehensive Packaged Air Conditioning and the Business Incentive programs. In addition, the Nonresidential Direct Installation program will incorporate refrigeration and air conditioning components.

7. Program Outcomes

The Nonresidential Direct Installation Program is designed to produce cost-effective, long-term peak demand and energy savings by providing no-cost and low-cost energy efficient equipment retrofits to very small and small commercial customers in SCE's

service territory. The program will target the entire service territory in a staged delivery approach that provides program services in specific geographic areas at different times allowing for a more concentrated, directed, and yet comprehensive program. In addition, SCE will continue coordination with CBO/FBOs to offer job creation opportunities for local youth in challenged areas of SCE's service territory.

In 2006-08, SCE expects to enroll 17,200 small business customers in the Nonresidential Direct Installation program. In addition, 300 small business customers will be solicited for the on-bill financing pilot.

8. Program Strategy

The Nonresidential Direct Installation program works through a set of approved contractors and third-party (CBO/FBOs) implementers who are empowered to promote, enroll, and audit qualified customers and to install measures at no cost to participants.

This approach addresses three key barriers to participation by these customers:

- Lack of available capital for energy efficiency investment
- Concerns about the benefits of energy efficiency
- Administrative and time burden of participating in other programs

This combination of delivery mechanisms covering full measure costs and using local contractors and community agencies creates a powerful engine to transform historically non-participating customers.

The program is a turnkey offering that provides the customers with a single source for information, technical assistance, and financial incentives. The program will be administered through a prime contractor who will be responsible for the following:

- Marketing to customers.
- Customer enrollment in the program.
- Performing on-site audits and collecting all equipment and energy data, identifying energy efficiency opportunities, completing an analysis, and making energy efficiency recommendations to the customer.
- Presentation of the recommendations to the customer and obtaining customer agreement to proceed with installation of retrofits.
- Explanation to the customer about the finance and the payment agreement.
- Installation of eligible measures.
- Completion of the contracts between SCE, customer and vendor.
- 100% post installation inspection for quality assurance.
- Tracking program and customer activity.
- Tracking and setting aside all equipment for proper disposal.
- Disposal of equipment and materials.

Financing programs are offered by several utilities throughout North America. While utilities in Canada have consistently offered financing for energy efficiency investments, only a handful in the U.S. are currently offering such an option. In general, the primary operating principles for these utilities include:

- Offering a combination of loan and incentive.

- Structuring the package to result in a relatively short payback period.
- Restrict participation to customers with very good credit histories.

For 2006-2008 SCE will pilot an on-bill financing approach. Rather than paying the entire cost of equipment retrofits, the financing approach includes a customer paid portion. On-bill financing for qualifying customers with energy intensive equipment retrofits such as refrigeration will be piloted to larger small businesses that have sufficient energy savings potential to offset part of the cost of the project through monthly bill savings. Forty percent (40%) of the customer retrofit invoice will be paid by SCE through the incentive directly to the contractor. Sixty percent (60%) will be financed by SCE at no interest to the customer for a period of no more than 24 months.

This approach has three potential advantages:

- Increased energy savings potential by spreading dollars further.
- Financial participation by customers fosters greater investment in the efficient operation of equipment.
- Allows the program to fund more expensive equipment replacements, which brings larger customers and more energy intensive equipment into the range of possible measures.

9. Program Objectives

The Direct Installation Program is designed to secure cost-effective, permanent, long term and verifiable annual energy savings from small businesses that typically do not incorporate energy efficiency in their businesses due to costs, the split incentive barrier, and remote location within SCE's service area.

A second objective of the program in 2006-08 is to conduct a pilot on-bill financing element to collect data and evaluate the benefits of offering on-bill financing as a supplemental or alternative means of mitigating financial barriers to energy efficiency investments. The SCE pilot program will be offered to customers with connected demands greater than 50 kW but less than 100 kW. Targeted customers will include grocery stores, restaurants, schools and municipal buildings.

The on-bill financing pilot will be coordinated with pilot programs being proposed by San Diego Gas & Electric and by the Southern California Gas Company. Taken together, the results of the three efforts will provide answers to several important program design and policy questions:

- Does on-bill financing secure the participation of customers who otherwise do not participate in incentive-type programs?
- Do the benefits from additional participation outweigh the additional administrative and other program costs?
- What is the default and partial payment rate?
- What are the actual carrying costs of operating a zero interest on-bill financing option?

- Does on-bill financing allow for the increased adoption of more expensive measures?

10. Program Implementation

The Nonresidential Direct Installation Program is offered on a first-come, first-served basis and will be available from June 1, 2006 through December 31, 2008 or until program funds are spent, whichever comes first.

Equipment installation contractors selected through a competitive bidding process will perform the program services. In addition, in certain areas SCE will leverage CBO/FBOs that will use community resources to perform program services. Services will include job training and contractor selection so that local constituents can deliver program services. These CBOs or FBOs will conduct their activities through a performance-based contract with SCE. SCE, through its selected prime contractor, will work with and coordinate the work of CBO/FBO.

The program will coordinate with other SCE programs to deliver an overarching message of energy efficiency that spans both residential and nonresidential segments, to facilitate access to all energy efficiency and applicable demand response programs. SCE's general energy efficiency education efforts and literature will be used to support the program through general communications.

The on-bill financing pilot will be offered to pre-identified small business customers who have excellent credit standing with SCE. This is defined as customers who have been receiving electricity services for at least two years in the current location, with bill in arrears no more than 30 days, and with no partial payments for at least two years. SCE will be responsible for the credit underwriting process and provide a list of qualified customers to third-party implementers. Customers will be required to sign a loan document as part of the pilot program. The loan/incentive packages will be structured to provide for a two year loan payback. SCE may modify these eligibility requirements through the pilot stage to optimize the pilot's performance.

To support the pilot program, SCE will undertake changes to its billing system to allow for the on-bill payment. These changes are expected to be completed by August 1, 2006, assuming approval of the pilot by December, 2005. SCE will develop a loan contract that complies with State and Federal lending laws and regulations. The loans, all loan costs, and administrative costs will be funded by ratepayers. Collections from repayments will be credited back to the program.

11. Customer Description

The targeted market segments are very small and small nonresidential customers whose annual electric demand is less than 20 kW in targeted rural areas other than the Los Angeles basin, and targeted areas identified by the CBO/FBOs working with SCE. Throughout the program cycle, SCE will focus on remote areas of the service territory especially in coordination with local government partnerships.

In 2006, eligible customers will be nonresidential customers with annual electric demand less than 100 kW in targeted areas within SCE service territory. In program years 2007 and 2008, the program could be expanded to include tax-exempt customers such as government buildings and schools with annual demand between 50 kW and 100 kW for participation in the on-bill financing pilot program.

12. Customer Interface

The program will be delivered through a prime contractor or depending upon the competitive bid process, several prime contractors that perform door-to-door program marketing and customer sign-ups. Additionally, the program will work with SCE's Local Government Partnership program to target cities to promote the program via outreach activities, education opportunities, and on-site visits. Past program experience indicates that the door-to-door, face-to-face marketing is a very effective method of reaching very small and small commercial customers. This approach increases participation levels while decreasing the level of free-ridership. To overcome key non-financial barriers, SCE will leverage the community influence of local governments, CBO/FBOs, and selected organizations that have the unique cultural, language or economic knowledge of under-participating communities.

13. Energy Measures and Program Activities

13.1. Measures Information

Energy savings and demand reduction measures are included in the associated calculator and portfolio workbook.

13.2. Energy Savings and Demand Reduction Level Data

Energy savings and demand reduction level data are included in the associated calculator and portfolio workbook.

13.3. Non-energy Activities

Program-related activities not directly tied to measurable energy savings include job performance evaluations, data requests, workplace organization, informational meetings, training, corporate requirements (e.g., safety meetings, work environment surveys, etc.), computer system maintenance, and technical reading.

An important aspect of the program is the job-creation partnership with the CBO/FBOs, designed to train and create jobs in the energy efficiency installation and audits segment for those in the economically underserved cities. Other non-energy related activities derived from the program include increased customer awareness to the benefits of energy efficiency.

13.4. Subcontractor Activities

It is anticipated that several third-party programs offering similar retrofits to small business customers will be continued under a consolidated program design administered by SCE.

13.5. Quality Assurance and Evaluation Activities

To determine the total net energy and demand savings attributable to the program and overall customer satisfaction, on site customer inspections and survey will be performed. CBO/FBOs will contact 100% of participating customers to determine customer satisfaction. Site verification will be conducted for each completed job by primary contractors. Additionally, SCE will send a set of separate inspectors to perform post-installation inspections to ensure quality standards are met. SCE will also select approximately 20 percent of participating customers, at whose sites SCE will perform post installation inspections for quality of work and customer satisfaction. Inspectors will be instructed to check for sufficient light levels, coverage, no flickering, compliance to electrical codes, proper completion of work and good aesthetics.

13.5.1. Expected Number/Percent of Inspections

The Nonresidential Direct Installation program will adopt a rigorous inspection plan that will ensure that itemized measures are installed and operational. The overall level of inspections for this program will be approximately 20% of the total number of site verifications.

3.6. Marketing Activities

The program will deploy marketing strategies necessary to increase customer awareness of the program. Coordinating with heads of local communities, CBO/FBOs, energy efficiency awareness may include:

- Energy efficiency literature distribution.
- Training of local CBO /FBOs personnel.
- Energy use surveys conducted by SCE contractors and local resources recruited by CBO/FBOs.

This program is selectively marketed to the target customer group through telemarketing and direct contact. Customer communication is conducted 'in-language', where appropriate. Chambers of commerce and/or local city officials are typically notified and SCE or the CBOs or FBOs will partner with the community to market to the selected customer groups.

14. Program Changes

The 2006-2008 Nonresidential Direct Installation Program will be working with two Primary Contractors. One will be in charge of implementing the program in remote areas of SCE's service territory in conjunction with SCE's Local Partnerships. The second Primary Contractor will work within the Los Angeles basin in conjunction with selected CBO/FBOs to deliver the program and assist in job creations and community development.