

Energy Efficient Program Made Efficient

1. Projected Program Budget	\$	1,500,000
2. Projected Program Impacts		
MWh		n/a
MW (Summer Peak)		n/a
3. Program Cost Effectiveness		
TRC		n/a
PAC		n/a

4. Program Descriptors

Market Sector:	Cross-cutting
Program Classification:	Statewide
Program Status:	New

5. Program Statement

The Recovering Opportunities program finds potential "lost opportunities" and exploits them. These opportunities are energy efficiency options offering long-lived, cost-effective savings and which, if not exploited promptly or simultaneously with other low cost energy efficiency measures or in tandem with other load-reduction technologies, can easily be lost.

6. Program Rationale

In general, consumers assume that replacing an HVAC system is the most that can be done to make energy efficiency upgrades. But the installation process provides a significant opportunity to inform them on other energy saving measures. This opportunity arose from new regulation: A recent title 24 changes that took affect in October requires an HVAC installer to have his/her system independently tested by a HERS rater when there is a change in the HVAC equipment. Our plan is designed to use the regulations to promote energy efficiency programs by assisting the rater – who is already in the consumer's home – to complete a duct test for the installer. In the process, this rater, armed with the knowledge of energy efficiency programs and ability to provide other services, including an in-home survey and consumer information on other energy efficiency programs offered by SCE.

7. Program Outcomes

The overarching goal of the program is to encourage installers to secure building permits through training and awareness to ensure quality installations. According to the California Energy Commission, nearly 95% of the replacement systems that are installed each year are not permitted. A goal of our program is to increase the number of permits pulled by HVAC installers. There is no definitive statistics indicating the exact number of permits pulled each year, but the quoted number is a starting point. The importance of increasing the number of permits being pulled is revenue generation for the local

municipality and allows the homeowner to be in compliance with the codes. In fact the California Association of Realtors has developed a disclosure for home sellers indicating if the home seller has installed a new HVAC system recently and asks was the system permitted. Having this in place increases the awareness of the requirements.

8. Program Strategy

This program provides homeowners with the opportunity to take advantage of Federal Tax Credits that go into effect on 1/1/06. Some of what the HVAC installer does may qualify for the credit, and according to the regulations the items have to be verified by a rater that follows the RESNET national guidelines. CHEERS raters would be compliant with such guidelines.

A key to the success of this plan is assisting both the installer and the consumer in participating. To that end CHEERS will promote those installers that agree to specific participation guidelines. A component of this plan is to run advertising listing those installers that agree to participate. The ads provide an opportunity for installers to differentiate themselves from other installers, and more importantly give the consumer a source for selecting an installer to complete a job. The ads will indicate that consumers who use one of these installers will receive a free in-home survey, collateral material on other programs and will have their systems independently tested to ensure quality and thoroughness. The ads will also indicate the contractors listed on the page have all the licenses, bonding and insurance requirements, plus provide the free in-home survey, have the systems independently tested.

9. Program Objectives

Program Element	2006	2007
CFL \tilde{Q} installed	3.000	3.000
In-Home Surveys		
# of training sessions	10	10
# of brochures	5000	5000

10. Program Implementation

Task 1 – Re-asses Implementation Timeline, Marketing Plan, and Staffing Rates or Unit Pricing with SCE for Inclusion in the Purchase Order

The implementer will provide an updated timeline document to SCE.

Task 2 – Assemble and Submit SCE Approved Purchase Order Kit

A purchase order kit will be developed and submitted.

Task 3 – Build Tracking System

The tracking system will be developed to support those elements that are accepted by SCE program managers. The contractor will use a mobile device when they are completing the verifications for duct testing and completing the in-home survey.

Sub-Tasks:

- Establish Data System Details
- Data Integration & Exchange
- Database Format & Details
- Hard Copy Backup & Procedures

Task 4 – Develop Marketing Materials and Obtain Approval from SCE

CHEERS has already developed several marketing products for raters, installers and homeowners that are effective means of encouraging them to participate in this plan. Other products include, but are not necessarily limited to, the following:

Identity System

Electronic Newsletter – to support participating installers and distributors.

Web Site – including a new look and content to support the program. CHEERS has the address already reserved (www.HVACdoneright.org).

PowerPoint Presentations, including:

- **CHEERS to Distributors** - to help distributors establish relationships that will help them build their business and build their income.
- **CHEERS & Distributors to Installers** - to persuade installers in specific markets that CHEERS provides an important and marketable service.
- **CHEERS & Installers to homeowners** - message that points to a “CHEERS approval” of a HVAC installer is a solid indication of the installers dedication to quality.

Installer Brochure – outlining benefits of using CHEERS for compliance and quality installations. This brochure has been developed. A pdf is available.

Consumer Brochure – including the five questions to ask prior to having a system installed. This brochure has been developed. A pdf is available.

Program Road Show –during March, April, and May. These shows will be to introduce our plans to installers and explain our goals for them (such as ways to be more professional, etc.).

“How To Put The Program to Work” Brochure – dealing with how each installer can/should use the program to their individual benefit.

The Installers Manual – providing information on all SCE energy efficiency programs for the installer and the homeowner. This also would include examples of letters they can send to the homeowners or others, as well as sales approaches for the installers to use

Installer Road Show “Take Home Kit” – including all material that team will be producing to support installers and their homeowner clients.

Installer Program Letter – allowing installers to provide a one page “leave behind” outlining the benefits of using their services and CHEERS raters.

Incentive Program – to entice installers by putting extra money in their pockets, provide a trip or other incentives for a certain number of successful verifications.

Folder/Carrier –to be used when presentation are made to distributors or installers.

Co-Op Advertising Program – explaining how installers can participate.

In-Office Display Cards – to be used when installers go to shows or in their own office.

Lawn Sign – to inform the neighborhood of a job well done.

Removable Point-of-Rating Stickers – which can be used by the raters when they verify the system.

Task 5 – Implement Marketing Campaign Planning

The marketing contractor will develop and test a concept for the program brand and design brand elements for application to all marketing materials, including advertising, signage and brochures. The brand identity will include the program name, logo and audience-specific taglines, as well as a graphics approach.

Task 6 – Enroll Customers

The program will target upstream HVAC distributors as a means to promote the program to HVAC installers. Since the installers buy the equipment from the distributors, these firms are likely candidates to promote our program. The new energy regulations require duct testing to occur when a new piece of equipment is installed in residential and non-residential properties. Distributors have an interest in providing value to their services. By working with Cypress CHEERS will be able to target distributors that wish to participate in this program. We will market to the distributors in a variety of means (direct marketing, current relationships) and determine their willingness to participate. We will have guidelines developed that indicate what we expect the distributor to do. Once the distributor agrees to participate we will gather their information. A component

of the program will allow distributors to market the program to their installers, and may provide co-op advertising, hosting meetings at the distributors office locations.

Task 7 – Install Energy Efficient Hardware, Issue Customer Rebates, and/or Perform Program Services

There are several measures included in this plan.

- An in-home energy efficiency survey will allow the rater to collect the data on the home and report back to SCE with the results, and provide additional guidance to the homeowner on what can be done to make their home energy efficient. The information collected may include both gas and electrical. This allows our program to address the lost opportunities that will occur if the data is not collected when the equipment is being installed. This data will be sent to SCE electronically so the gas related measures could be provided to SCG for their programs. As an example, if the rater collects the data on the water heater and it turns out to be very old, then SCG could offer the consumer information on water heater rebates or other related programs.
- The rater will provide three free CFL's to participating consumers. The rater will collect the old light bulbs or at least capture what he/she is replacing (incandescent 60w, 75w, etc).
- Countermind, a nationally reconigized mobile solution program, will develop the mobile solution for the rater. The mobile solution will include the in-home survey to let the rater collect data about the home while at the home. This provides significant efficiencies in program delivery. The results of the in-home survey will be sent electronically to SCE for their use. Data that will be collected can then be sent to program implementers for their use such as the age of the refrigerator, or any window air-conditioners.
- The rater will provide information to the consumer about other programs, including collateral material from other SCE programs and 3rd party programs.
- Based upon information gathered by the rater or measures installed by the HVAC contractor, the rater will provide information to the homeowner about the availability of Federal Tax Credits for existing housing. Tax credits are available up to \$500 per home (Please see Appendix 4 for existing housing tax credit eligibility). It is important to note for the Federal Tax Credits they must be verified by a RESNET Accredited rater. All CHEERS raters are RESNET accredited.

Task 8 – Inspect Installed Jobs

The Bidder with present a quality control plan that involves inspection of the job site for hardware installation (Resource programs) and/or customer satisfaction surveys (Non-Resource programs). This task with also include a plan to address customer complaints. All individuals using CHEERS to provide field verification services for this program will have their performance continuously monitored through a Quality Assurance Program, which has four components:

- Initial rater & Installer QA
- Documentation Review
- Onsite Field QA Inspection
- Registry Data Entry Review

Task 9 – Remedy Installation Issues

To insure that customer complaints and concerns receive timely responses and quick resolutions we have listed our suggestions in our customer complaint response plan:

1. Make available to customers contact information for complaints such as: contact person(s), telephone numbers (during-office hours and after-office hours), mailing address, email, and fax number. Communication methods such as newsletters, bill stuffers, CCR can be used.
2. Designate personnel who are responsible for managing the complaints. This person(s) documents the complaint, initiates the response, and insures that the complaint is addressed in a timely manner.
3. Maintain a log of customer complaints with information to track the life of the complaint. The log may include customer name, customer address, date of complaint, address of occurrence, description of complaint, and resolution of complaint.
4. Document who in the field is responsible for responding to the complaint and make them accountable for a timely resolution of the problem. If possible, give work orders to personnel responsible for resolving the complaint, assisting the field staff in maintaining accountability of the problem.
5. Review records of complaints received and responses provided periodically. Look for underlying causes of problems that could be corrected and better ways of responding. Consider mapping the location of complaints in distribution system to identify problem areas.

Task 10 – Perform Customer Satisfaction Surveys

CHEERS will rely on its customer services partner, Cypress, to handle the customer satisfaction surveys. Cypress will conduct these services out of their Customer Service Center (CSC), a full-service call center and data warehouse located in Hemet, California.

Task 11 – Address Customer Satisfaction Issues

Customers that rate low on the satisfaction chart will be asked if they are willing to allow SCE (the Cypress CSC) to provide further support to improve their opinion. If so, the CSR will schedule a time for Cypress to contact the customer. The CSR will also note the primary nature of this customer's dissatisfaction, along with any other notes or feedback from the conversation.

At that date, a technical expert will contact the customer, and conduct a phone interview to identify what issues have caused the customer dissatisfaction. Information available will include the survey results as well as the CSR records to date and the log of problem and resolution calls from Task 9 (if applicable). The primary role will be to diagnose the reason for dissatisfaction, and identify a remedy (if possible) to the issue. If possible, the CSR will provide additional information to educate the consumer to remedy the situation at that time. Some satisfaction issues may result from the customer forgetting or misunderstanding the nature of the CHEERS program, so this may be possible as an immediate strategy.

If the issue is resulting in ongoing technical issues related to the CHEERS rating itself (e.g. complaints about performance), the CSR will note this item in the data system, which will trigger a notification of the CHEERS problem solving technician (e.g. from Task 9) assigned to the task. The technician will then be assigned the task of troubleshooting, which could include contacting the customer again to provide additional education or service.

Regardless of the issue and resolution, the customer will be “flagged” for additional follow-up after this process to identify that we have addressed the satisfaction issues to the greatest degree possible. All dissatisfied customers will be tracked, over time, as a special customer that will be followed to identify how their satisfaction improves during the life of the program.

Task 12 – Invoice SCE for Completed Jobs

Cypress, one of CHEERS key subcontractors, has the systems in place to provide all reporting and invoicing requirements. All systems are tied to a singular database to provide accuracy in reporting and mitigate issues regarding multiple databases. All data collected in the field, hours billed and expenses incurred for implementing the program will be tracked and reported.

Task 13 – Perform Program Reporting

Ongoing information tracking is a key portion of the Cypress internal processes and marketing systems. Cypress also provides information about ongoing performance in a clear, easy to understand format.

Task 14 – Program Ramp Down

The program will be able to implement a ramp down of our elements quite easily. We will have ramp downs occurring two different times during the program year. Most of the cooling related installations occur between Memorial Day and Labor Day. Our advertising is designed to coincide with this change-out part of the year. CHEERS anticipates this occurring twice, once during 2006 and once during 2007. This is similar for our training that we will implement for HVAC installers, distributors, and others where we will need multiple ramp down and ramp ups of programs. History indicates training for installers should not occur during the summer months, and our plan is designed with that in mind. We anticipate providing the majority of our training and outreach during the months leading up to June. We will have limited training during the summer months – such as sessions after work where we provide buffet dinner – but the majority of the training will be ramped down prior to summer.

All hardware will be installed during the time when a HVAC system is being installed and rater is verifying the duct systems. Also, all of our advertising will indicate there are a limited number of measures for participating installers and consumers.

Task 15 – Shut Down the Program

Upon shut down of program we will be able to provide continuing support. In addition many of the HVAC installers provide continuing maintenance contracts with the

consumer once they install the equipment. This maintenance includes such items as changing out the filters or checking the systems once or twice a year.

Task 16 – Respond to Miscellaneous Utility/CPUC Data Requests

CHEERS and Cypress have the systems and technology in place to provide access to and creation of any reports necessary. Because raters will use our mobile device for collecting data, we will can provide real-time reporting. The rater will collect the data from the home (results of duct test, results of in-home survey) and synchronizes with the Cypress database. This will occur in two instances, from a wireless connection or when the rater will place the device into a cradle that is linked to their computer.

Task 17 – Follow Up with Remaining and New Customer Issues

CHEERS and our subcontractors will have all of this information available to SCE for their use. As indicated in Task 15 most of the HVAC systems installed will have a warranty of some type. This information will be passed on to SCE and our reporting and database will indicate the type and term of warranty provided to the consumer. This could include an extended warranty that is purchased by the consumer or is offered by the installer as a part of the program.

Task 18 – Submit Final Program Report

CHEERS will provide continuous feedback to the program, and will provide the final report.

11. Customer Description

- HVAC Distributors – this customer group is a valuable element in the promotion and implementation of this program. Through one of our key subcontractors, Cypress, who has experience in providing outreach to the upstream HVAC market, will market our program and concept to the distributors throughout SCE service territory. There are several large distributors that provide the majority of the equipment to installers such as U.S. Air and Slakey Brothers.
- HVAC Installers – According to the Contractors State License Board (CSLB) there are a total of 10,158 C-20 installers statewide. These C-20 contractors can be further segmented into the markets they target (Residential, non-residential, & other). Further work will indicate the installers will segment the markets by new construction and replacement. Estimates according to the 2005 Building Energy Efficiency Standards work papers developed by PG&E indicate there are approximately 300,000 HVAC replacements each year in Residential properties and approximately 140,000 in non-residential.
- CHEERS raters – Due to the recent Title-24 revisions CHEERS has trained and certified a number of raters that are planning to complete verifications for the replacement market. CHEERS plans to reach out to these raters for participating in our program. This provides an opportunity for raters to expand the scope of their services.
- Homeowners – Through Staples Marketing we will have an advertising campaign promoting quality installations by participating HVAC installers. We plan to educate the homeowner on asking certain questions when they hire a HVAC

installer. The material we have attached is an example of how we plan to educate the consumer.

12. Customer Interface

The final phase of the marketing program is the consumer outreach, a combined effort of CHEERS and the participating installers. Equipped with Take Home Kits, the installers will apply the program brand and message to their own sales activities. To support them in that effort, CHEERS will place a co-op advertising campaign that pays part of the cost of approved advertising prominently displaying the program brand, tagline and message. In addition, the program will provide a web site regarding the program and pay for a top response position when consumers undertake internet searches with key words such as *HVAC installers*.

13. Energy Measures and Program Activities

13.1. Measures Information

Non-Resource

13.2.1 Energy Savings and Demand Reduction Level Data

Non-Resource

13.3. Non-energy Activities (Audits, Trainings, etc.)

Program Element	2006	2007
CFLs installed	3,000	3,000
In-Home Surveys	1,000	1,000
# of training sessions	20	20
# of brochures	10,000	10,000

13.4. Subcontractor Activities

[Query bidder]

13.5. Quality Assurance and Evaluation Activities

The main component of the CHEERS QA program, the Onsite Field QA, requires a CHEERS QA representative to visit the site and observe the rater performing the onsite field verification and diagnostic testing. This will insure that the correct procedures are being followed in the verification and testing process, and will provide instant feedback to the rater.

When a rater is due for this type of QA, CHEERS will notify the rater and require them to provide their verification and diagnostic testing schedule within a specified period of time. The CHEERS QA representative will meet the rater onsite to observe the onsite verification and diagnostic test and independently verify the test results for accuracy.

The frequency of this type of QA will depend upon the rater's experience level. For raters with less than 25 field verifications and diagnostic tests the target level of field QA will be 10% of those homes requiring field verification and diagnostic testing. For raters that have completed more than 25 field verifications and diagnostic tests, and at CHEERS QA representative's discretion, the field QA level can be reduced to a 5% QA level.

The CHEERS QA representative will complete a written report detailing the results of this QA review, will provide a copy to the rater, and will submit a copy to be included in the rater's permanent file.

Registry Data Entry Review

A CHEERS QA representative will be responsible for reviewing the reporting of test and or sampled data through the CHEERS Registry to CHEERS. The frequency of this type of QA will be 1% monthly of lots added including the project.

The Registry Data Entry Review will include:

- The completeness of information provided for the builder, project, plan and lots/buildings including project addresses as well as all test questions filled out.
- The project is at the appropriate test/sampled percentage based on CEC/EPA guidelines.
- The floor plans follow the appropriate test/sampling guidelines.

The CHEERS QA representative will complete a written report detailing the results of this QA review, will provide a copy to the rater, and will submit a copy to be included in the rater's permanent file.

13.6. Marketing Activities

See Tasks 4 and 5 above.