

**PGE2052 Energy Fitness—RHA**

2006 - 2008

1. Projected Budget*	\$2,994,245
2. Projected Net Impacts	
MWh	10,669
MW (Summer Peak)	1.666
Therms	0
3. Cost Effectiveness*	
TRC	1.51
PAC	1.41

\*Does not include PG&E contract administration costs, which are estimated at 5 percent of expected contract value and included at the portfolio level.

**4. Descriptors**

Market Sector: Nonresidential (Commercial, Industrial, Agriculture)  
 Classification: Existing Third Party – Direct Install  
 Status: Continuation

RHA’s market experience and outreach efforts conducted as part of our existing Energy Fitness Program have shown there is still significant interest by small and very small business owners for a direct install program catering to their size business. RHA proposes to fill this need by implementing the 2006-2008 Energy Fitness Program.

Richard Heath and Associates’ (RHA) 2006-2008 Energy Fitness Program (EFP) seeks to reduce energy consumption and energy-related costs by identifying energy conservation measures in very small and small, hard-to-reach, businesses north of Sacramento, providing direct installation of cost-effective energy conservation measures (lighting, low-flow pre-rinse spray valve, vending machine controllers, window film, occupancy sensors, and AC condenser coil cleaning) at no cost to IOU customers in PG&E’s service territory. The Energy Fitness Program will qualify and enroll customers, conduct initial and in-depth energy audits, install cost-effective energy conservation measures, provide technical assistance; including coordinating with other programs, and produce a final Energy Fitness Report. Those who desire to install additional recommended measures will be assisted in finding qualified contractors, locating financing opportunities, and participation in other third-party and utility-sponsored energy programs

This document reflects the scope of work proposed for RHA’s 2006-2008 north of Sacramento Energy Fitness Program and provides the implementation strategy for the Energy Fitness Program. RHA’s proposed goal is to serve 2,043 small and very small, hard to reach nonresidential PG&E utility customers in the area north of Sacramento over a three year period.

The 2006-2008 Energy Fitness Program is a direct install program modeled on the 2002-2003 and 2004-2005 Energy Fitness Programs with minor modifications associated with streamlining

the entire program. Through September 30, 2005, the 2004-2005 Program has served 1,298 commercial customers including hard to reach, small and very small businesses with an average savings of 1.62 kW, 7,559 kWh and an average estimated cost savings to the customer of \$1,434. To date, all Program goals have been exceeded. RHA served customers in towns with populations as low as 154 and requiring over two hours travel time.

By continuing to identify small businesses in sparsely populated towns, RHA plans to use the following strategies to permanently reduce energy consumption and peak demand in the 2006-2008 Energy Fitness Program in order to attain an average per business savings goal of 7,007 gross kWh and 1.4 kW.

Following are the strategies RHA has used and will continue to use to attain program goals:

**Strategy 1: Reduce energy consumption on a permanent basis**

Reduce energy consumption on a permanent basis by:

- Installing energy saving measures (primarily lighting and other appropriate measures within the average cost allotment per business).
- Conducting a facility energy analysis to identify cost-effective measures that will provide permanent energy savings.
- Assisting participants in getting identified cost-effective measures installed by providing assistance in rebate applications and financing information.

**Strategy 2: Reduce peak electrical demand**

Reduce peak electrical demand by:

- Installing, and recommending to be installed, energy conservation measures that will permanently reduce peak demand (energy-efficient lighting, motors, refrigeration, HVAC systems, etc.).
- Conduct an AC condenser coil cleaning program on non-residential buildings to address charge and maintenance issues with air conditioning systems.
- Remove energy consuming devices that are not necessary (e.g. delamping unnecessary lighting).

**Strategy 3: Provide cost-effective energy conservation measures**

Provide cost-effective energy conservation measures to program participants by:

- Installing or recommending to be installed, only cost-effective energy conservation measures that have been identified as part of the Express Efficiency Program, DEER, or other available programs; or if the lifecycle payback meets or exceeds the client's expectations.

**Strategy 4: Address market failures and barrier**

The EFP will address identified market failures and barriers by:

- Targeting services directly to nonresidential utility customers who need it the most – the hard-to-reach, very-small, and small businesses in the area north of Sacramento.
- Providing energy services and consumer information in a way to make it easy for business owners to understand, including multilingual materials.

- Utilizing language-competent multilingual personnel.
- Actually providing and installing measures in nonresidential facilities in addition to producing energy analysis reports. The client won't have to spend time looking for materials or looking for, and/or contracting with, an energy service provider.

**Strategy 5: Address equity considerations**

The EFP will address equity considerations by:

- Targeting nonresidential customers in rural areas north of Sacramento.
- Providing services that nonresidential IOU customers are entitled to through their payment of the Public Purpose Program assessment in their utility bills.
- Assisting participants in accessing other CPUC-funded programs in the area (PG&E's Express Efficiency Program and any and all other appropriate third-party programs).

**Strategy 6: Provide an innovative program to nonresidential IOU customers in California**

The EFP is an innovative program that provides services to nonresidential IOU customers in California that:

- Have demonstrated savings and program success during the 2002-2003 and 2004-2005 funding cycles.
- Provides energy conservation measures at no charge for very-small and small nonresidential customers.
- Provides personalized energy services to customers who need it the most.
- Works directly with customers to achieve their energy savings goals.

**Strategy 7: Assist customers in taking advantage of other energy conservation and efficiency programs**

The EFP will assist and encourage participants to take advantage of other energy conservation and efficiency programs by:

- Assisting customers in applying for rebates and incentives offered by PG&E, private entities, the State of California, and the federal government by incorporating and supporting them within this program.
- Assisting the State and PG&E in meeting their energy conservation goals and objectives.

**5. Statement**

RHA will continue to provide direct install services to PG&E customers with a kW demand of less than 100, and/or term usage of less than 50,000 in the area north of Sacramento. While RHA's Energy Fitness Programs have been successful in reducing energy consumption in almost 2,500 small or very small businesses to date, there still remains a large untouched market of potential customers who would benefit from the direct installation of lighting and other comprehensive measures, and the significant energy savings that would result. The primary market barriers to reaching the small and very small nonresidential businesses with an energy savings program that have been identified by the Investor-Owned Utility companies, the CPUC, and RHA include:

**Language Barriers**

The 1997 Economic Census found that just over 25 percent of all businesses were owned by Hispanics, Asians, and Pacific Islanders, the ethnic groups most likely to not speak English as their primary language.

**Geographic Areas**

The target market area will be the area north of Sacramento. Within this territory, the market area is spatially larger as the number of potential clients is actually smaller. There is a much lower population density in the area as compared to the metropolitan areas and is further reduced by the presence of several municipal utility districts within the zone. Previous programs have concentrated their efforts on highly concentrated urban areas and ignoring this area of northern California.

**Economic Barriers**

Economic barriers also have kept market penetration in the small and very small nonresidential market very low. Facility owners are understandably reluctant to replace or upgrade functioning equipment in leased locations because the economic benefit goes to the tenant. Furthermore, small and very small business owners may not have the financial resources to choose energy efficient upgrades even though they would provide savings to their utility bill. A plan to surmount these barriers is provided in the Program Rationale section below.

**6. Rationale**

Like RHA's prior 2002-2003 Small Nonresidential Energy Fitness Program (SNEF) and its current 2004-2005 Energy Fitness Program (EFP), the 2006-2008 Energy Fitness Program was developed to address real and perceived barriers of hard-to-reach, small and very-small businesses to accessing energy efficiency programs and effectively dealing with increasing energy costs and diminishing profits. In hard-to-reach areas of California economically, culturally, and geographically diverse groups of IOU customers are often overlooked by energy service companies (ESCOs) because they are too small to be profitably dealt with; they miss out on energy efficiency programs because of language or cultural barriers; and often their economic ability to pay for the services is limited or nonexistent (the low-income business owners). RHA has worked with many of these groups in the past on a variety of public service-related and social marketing programs, and as a minority-owned and operated business, understands many of the impediments facing these businesses as they struggle to compete with better financed mainstream operations.

While RHA's Energy Fitness Program has been able to meet and exceed its targeted goals in terms of the number of customers and energy savings during the 2002-2003 and 2004-2005 funding cycles, there is still an overwhelming interest and desire from potential businesses in need of these services in the area north of Sacramento. The Program currently maintains a backlog of potential customers. There is no shortage of requests from businesses for the services provided by the Energy Fitness Program and there are hundreds and hundreds of businesses in the area north of Sacramento that have not yet been introduced to the program. The 2006-2008 Program will continue to provide these valuable services to a large number of underserved businesses in the area north of Sacramento.

Facility and business owners' primary market barriers of language, geographic area and the unavailability of economic resources often prohibit the owners from updating fixtures and appliances, even when to do so would result in energy savings. In order to surmount these barriers, RHA has developed the following plan for each of the barriers.

### **Language Barriers**

To address and overcome language barriers, RHA will develop marketing and outreach materials in appropriate languages, utilize ethnic business organizations to promote the program and recruit participants, develop public service announcements in appropriate languages for radio programs in the target market areas, and other means to ensure understanding of the program and its concepts.

### **Geographic Areas**

RHA will utilize its existing contacts within the communities in the underserved area north of Sacramento to outreach those businesses often overlooked by utility sponsored energy savings programs. RHA's headquarters for this project will be located in Chico, California, and will allow greater infiltration into the northern territory, while keeping travel time and costs to a minimum.

### **Economic Barriers**

The 2006-2008 Energy Fitness Program will target those small and very small nonresidential customers in need by installing a package of cost-effective energy conservation and efficiency measures, already paid for by the public benefits surcharges appended to each business' utility bill. RHA will demonstrate the benefits of the energy fitness process to customers through the installation of energy conservation measures and the identification and analysis of additional cost-effective measures. Customers are informed via a customized Final Energy Fitness Report of these additional measures and encouraged to implement them for additional energy cost savings.

## **7. Outcomes**

By implementing our package of measures resulting in reduction of energy use, technical assistance, education and Final Energy Fitness Reports, we will have achieved our desired program outcome. The Energy Fitness Program's success will be measured by the enrollment and participation of 2,043 small and very small non-residential businesses and permanent energy savings associated with the direct install of cost effective energy measures. RHA will measure the success of the Energy Fitness Program via quality assurance inspections (both CIP and internal), customer surveys (both at time of installation and when services are complete), and happy customers.

## **8. Strategy /Avoiding Lost Opportunities**

By definition, a direct install program relieves the potential for lost opportunity via thorough audit of existing, viable, and effective measures. At the time of the outreach, audit, and customer

education, businesses are provided every opportunity to ask questions and be involved in the energy conservation process.

To the greatest extent possible, inconvenience to the customer is minimized and the number of visits to the site is few. Within the program structure: enrollment is conducted during area canvassing, by telephone, or on the project website; customer permission is obtained; site audits performed; and installations of measures are completed—all without charge to the customer.

All small and very small nonresidential IOU customers within the Program's service territory are eligible if they meet any of the following criteria:

Their annual electric demand is less than 100 kW, and/or  
Their annual gas consumption is less than 50,000 therms.

By using a "package" (CFLs, light fixtures, vending machine controller, occupancy sensor, LED exit sign/retro kits, T12 to T8/5 replacements) of proposed energy savings measures it enables the Program to install the most comprehensive measures on a per customer basis thereby minimizing lost opportunities to the utmost while serving the widest range of nonresidential facilities (offices, retail, charter schools, mini-markets, churches, medical clinics). EFP's experience has shown that although Title 24 calls for installation of T-8s in new construction, the lack of enforcement personnel leads to a disregard of this guideline in the more rural counties.

RHA's EFP will incorporate as many of the following measures and activities as determined during each individual energy audit to reduce energy consumption and demand:

## **9. Objectives**

The primary goal of the Energy Fitness Program is to achieve permanent energy savings through short and long-term energy reduction objectives for hard-to-reach, small and very-small nonresidential customers. To meet these goals, the EFP Program will utilize the following short and long-term energy reduction objectives.

RHA's 2006-2008 EFP quantifiable objectives include:

Energy savings  
11,727,621 kWhs net annual savings  
14,310,776 kWhs gross savings  
122,472,777 kWhs net lifecycle savings

### **Objective 1. Short-term Energy Reduction**

RHA's EFP short-term energy reduction objective is to provide energy education and technical assistance activities to reduce energy use by:

- Conducting an initial walk-through energy survey of each business with the business owner. The EFP Energy Specialist will show the business owners where the Program will upgrade the lighting to benefit the business, demonstrate new lighting technologies that will be employed, and answer technical questions about the equipment, process, and energy savings potentials.

- Conducting an energy audit and providing an Energy Fitness Report describing historic energy use by the business and addressing where and how energy savings can be achieved.
- Providing energy conservation program materials from existing state, federal, and utility programs such as information on Energy Star rated equipment and PG&E's Express Efficiency Program.
- Informing the customer of possible HVAC operations and maintenance (O&M) measures where appropriate such as filter replacement, coil cleaning and duct sealing.

**Objective 2. Long-term Energy Reduction**

RHA's 2006-2008 EFP objectives to permanently reduce energy consumption and peak demand include strategies to: reduce energy consumption on a permanent basis; reduce peak electrical demand; provide cost-effective measures; address market failures and barriers; address the inequities in energy conservation program delivery methods; develop an innovative program; and take advantage of existing energy programs. To assure our overall objectives stated above are met, the Program will have the following milestones.

<b>Due Date</b>	<b>Milestone</b>	<b>Gross kWh Savings</b>
July 1, 2006	Y1, Second Quarter: Complete 227 direct installations of ECMs; Complete 75 condenser coil cleanings	1,590,589 40,605
October 1, 2006	Y1, Third Quarter: Complete 454 direct installations of ECMs Complete 200 condenser coil cleanings	3,181,178 108,282
January 1, 2007	Y1, Fourth Quarter: Complete 681 direct installations of ECMs	4,771,767
April 1, 2007	Y2, First Quarter: Complete 908 direct installations of ECMs	6,362,356
July 1, 2007	Y2, Second Quarter: Complete 1135 direct installations of ECMs Complete 275 condenser coil cleanings	7,952,945 148,888
October 1, 2007	Y2, Third Quarter: Complete 1362 direct installations of ECMs Complete 375 condenser coil cleanings	9,543,534 203,029
January 1, 2008	Y2, Fourth Quarter: Complete 1589 direct installations of ECMs	11,134,123
April 1, 2008	Y3, First Quarter: Complete 1816 direct installations of ECMs	12,724,712
July 1, 2008	Y3, Second Quarter: Complete 2043 direct installations of ECMs Complete 450 condenser coil cleanings	14,310,776 243,634

In addition, all required reports will be submitted on a timely basis.

**10. Implementation**

RHA's Energy Fitness Program is different from other nonresidential programs in that it provides the direct installation of energy saving measures instead of offering rebates or supplying information and hoping businesses take action on their own. The 2004-2005 Energy Fitness Program is currently in place and RHA proposes to make minor modifications to streamline the Program and utilize more funds for direct installation of energy conservation measures for greater energy savings.

RHA's experience with the hard-to-reach nonresidential market indicates that business owners are interested in reducing their rising energy costs, while property owners are interested in increasing the value of their property and presenting a high quality building to renting business

owners. This results in an opportunity for the program to offer services that make it economically attractive for both business and facility owners to reach their goals.

The 2006-2008 Energy Fitness Program will continue with its current staffing and continue outreach efforts to include communities that have not yet been served. In addition to maintaining current staff, RHA's EFP will utilize the same forms, process, and procedures that were developed in the prior funding cycles. This will facilitate the transition between programs and allow for an almost instant start-up period. Unknown at this point are changes that may need to be made in the current Program based on the results of the Evaluation, Measurement, and Verification study and feedback from PG&E and the CPUC. These changes, if extensive, may alter the implementation of the Program as designed in this proposal.

**A. Staffing**

The Energy Fitness Program will be staffed with the following positions:

- Program Director
- Program Manager
- Energy Audit Specialist
- Energy Specialist/Enrollment Coordinator
- Energy Technicians
- Project Coordinator/Data Entry Person
- Database Manager

**Program Director (.1)**

The Program Director is responsible for the overall supervision and management of the Energy Fitness Program. This person will be the contact person between PG&E and the CPUC and be responsible for producing the requisite reports.

**Program Manager (1)**

A Program Manager will be used to supervise the two Energy Fitness Crews each crew composed of two Energy Technicians. The Program Manager will also be available to conduct the in-depth energy audits and will be responsible for producing and delivering the Final Energy Fitness Reports.

**Energy Audit Specialist (1)**

The Energy Audit Specialist is responsible for analyzing the data collected by the Program Manager during the in-depth energy audit and producing the Final Energy Fitness Report. In addition to the Program Manager, the Energy Audit Specialist will be responsible for supervising the Energy Specialist/Enrollment Coordinator.

**Energy Specialist/Enrollment Coordinator (1)**

The Energy Specialist/Enrollment Coordinator is responsible for promoting and marketing the EFP program and coordinating outreach efforts. The Energy Specialist/Enrollment Coordinator will be responsible for enrolling potential customers on-site, conducting the Initial Energy Fitness Report, providing technical assistance, and conducting customer energy education. During the 2004-2005 Program RHA found that this was an essential position for providing technical assistance and energy

education while enrolling participants. The Energy Specialist/Enrollment Coordinator has to be able to quickly show business owners where they can save energy in their business. The Energy Specialist will carry samples of the energy efficient lamps that will be installed to demonstrate in-place. Often this requires the lamps to be left in place for a few days to determine if the business wants that particular type of lighting.

**Energy Technicians (4)**

Each Energy Fitness Crew will be staffed by two Energy Technicians. One Energy Technician will be the lead technician and is responsible for each installation and safety of the crew.

**Project Coordinator & Data Entry Person (1.5)**

Clerical staff will consist of a Project Coordinator and a data entry person. The Project Coordinator will be responsible for scheduling jobs in conjunction with the Program Managers and Energy Specialist, daily Quality Control check of data entry, creation of spreadsheets to better enable reporting, answering phones, compiling client reports and invoicing, assembling and mailing marketing materials, and providing program information to interested customers. The data entry person will be responsible for inputting program data into the program database.

**Database Manager (.5)**

The Database Manager is a part-time position. This person will be responsible for maintaining the EFP database and generating necessary reports.

**B. Measures and Activities** RHA's Energy Fitness Program will incorporate the following measures, activities and process components to reduce energy consumption and demand:

1. Marketing & Outreach (Described in Section 13.6)
  - Marketing efforts
  - Outreach
  - Enrollment
2. Initial Site Visit (Described in Section 13.3.3)
  - Enrollment
  - Initial Energy Fitness Report (preliminary energy audit/work order)
  - Technical Assistance
  - Energy Education
3. Energy Audit Site Visit (Described in Section 13.3.3)
  - Energy analysis (lighting, HVAC system, hot water, process equipment, etc.)
4. Direct Installation of Measures (Described in Section 10.F)
  - Install energy conservation measures (CFLs, T-8s and electronic ballasts, delamping, etc.)

- Conduct an AC Condenser Coil Cleaning program to service 450 HVAC units on owner-occupied businesses.
  - After-installation, replacement of failed or defective lamps and equipment.
5. Final Energy Fitness Report (Primary Audit Described in Section 13.3.3)
- Energy Utilization analysis
  - Energy Conservation Measures
  - Operations & Maintenance Measures
  - Payback Analysis of measures
  - Financing options and rebate utilization analysis
  - Energy education
6. Follow-up Activities
- Quality assurance follow-up. (Described in Section 13.5)
  - Provide technical assistance to customers wanting to do more. (Described in Paragraph 13.3.3)
  - Assist in applying for rebates and implementing work.

**C. Procedures for procurement, delivery, and installation of equipment.**

RHA's 2006-2008 Energy Fitness Program will procure energy conservation products and materials from local vendors as much as possible. Materials are purchased in bulk to reduce costs and to have at least one month's worth of work on-hand. At the end of the 2004-2005 Program, an analysis of installed measures will be conducted to determine the mix of lamps and other measures installed to ensure stock is on hand and readily available to best serve the customer during installation.

EFP Crews directly install all materials and equipment. Upon completion of a site visit, the business owner or a representative is asked to verify that the materials were installed by signing a form that states that the materials have been installed and are in working order.

**D. Description of specifications of qualifying equipment (i.e. minimum energy efficiency rating levels).**

All energy efficient materials installed in this program will be:

- Energy Star™ rated when applicable.
- One-year minimum replacement warranty.
- Appropriate for the application.

**E. Description of installation standards.**

RHA has developed a set of commercial lighting installation standards which will be used in this program. These standards are the same ones used in the 2002-2003 and 2004-2005 Programs and are in conformance with current standards used in Statewide EE programs, cover safety issues, address federal, State and local codes, and provide guidelines for correct

installation and usage. The installation standards include the 2005 Title 24 Standards & DEER updates.

**F. Direct installation of measures: (See Appendix A for calculation of savings)**

***Conversion of Standard 2-lamp, 4-Foot, T-12, Magnetically-ballasted Fluorescent Fixtures with Energy Efficient T-8 or T-5 lamps and Electronic Ballasts***

ECM: Replace existing 34- or 40-watt, T-12 fluorescent lamps and magnetic ballasts with 32-watt, T-8 lamps and electronic ballasts.

***Conversion of Standard 2-lamp, 8-Foot, T-12, Magnetically-ballasted Fluorescent Fixtures with Energy Efficient T-8 lamps and Electronic Ballasts***

ECM: Replace existing 8-foot, T-12 fluorescent lamps and magnetic ballasts with T-8 lamps and electronic ballasts.

***Screw-in Compact Fluorescent Lamps (CFLs)***

ECM: RHA proposes to replace incandescent lamps with CFLs. The wattages of the CFLs installed in this program range from 4 – 42 watts/lamp. The most common lamp to replace is a 75-watt incandescent lamp with 19-watt, electronic-ballasted, integrated CFL.

***Replacement of 200-watt Incandescent Fixture with Compact Fluorescent Fixture***

ECM: Replace 200-watt incandescent fixture with hardwired 65-watt compact fluorescent fixture.

***LED Exit Signs***

ECM: Replace 40 watt incandescent exit signs with a 1-watt, hardwired LED (light emitting diode) Exit sign or 2 watt LED Retro-kit.

ECM: Replace 40 watt incandescent exit signs with a 2-watt, LED (light emitting diode) Retro-kit.

***Delamping***

ECM: Convert a 4 foot 3-lamp, 2-ballast fixture to a 2-lamp one-ballast fixture. The original fixture wattage is based on T-12, 34- or 40-watt lamps with energy-saving ballast. One lamp and its associated ballast are removed.

ECM: Convert a 4 foot 4-lamp, 2-ballast fixture to a 2-lamp one-ballast fixture. The original fixture wattage is based on T-12, 34- or 40-watt lamps with energy-saving ballast. Two lamps and its associated ballast are removed.

ECM: Convert a standard 8 foot 2-lamp, 1-ballast fixture to a 1-lamp one-ballast fixture with a reflector. The original fixture wattage is based on T-12, F96 lamps with energy-saving ballast. One lamp and its associated ballast are removed.

***Optional ECMs***

Additional energy conservation measures that may be available to install if appropriate:

- Photocells
- Occupancy sensors
- Time clocks
- Vending machine controller
- Low flow pre-rinse spray valve
- Refrigeration gasket

These and other additional optional measures will be selected from the Express Efficiency Rebate schedule and DEER, as their cost-effectiveness has already been determined.

***Operations and Maintenance Measures***

Cost-effective Operations and Maintenance (O&M) Measures will be addressed during the initial site-visit by RHA Energy Technicians or the business owner/occupant will be instructed on how to do it themselves. O&M measures are often no-cost measures like removing unnecessary incandescent lamps, turning down hot water heaters, fixing dripping faucets, adjusting thermostat settings, and other measures which will save energy but do not require a costly level of effort.

Because the potential list of possible O&M measures are great and the potential savings completely variable, they will not be listed or discussed at this point. O&M measures typically have an immediate payback but their effects may not be significant on the customer's utility bills (unless there are a tremendous amount of such measures).

RHA Energy Technicians will note the O&M measures that they discover during the energy analysis of the facility and will record the O&M measures they perform during their site visit in the project database. They will be recognized in the facility's Energy Fitness Report. They will also note the measure to be undertaken by the owner/operator for further follow-up and assistance if needed.

***AC Condenser Coil Cleaning***

This measure will be directed to owner-occupied businesses to indicate the programmatic and delivery effectiveness of this measure on 450 split or packaged HVAC units. Included in this measure are the following components:

1. Clean condenser coils
2. Check air filters
3. Check refrigerant charge via temperature split

**11. Customer Description**

RHA's EFP Program will assist hard-to-reach, very-small and small, nonresidential energy users in the north of Sacramento area as defined by the following:

- **Very-small:** Customers whose annual electric peak demand is less than 20 kW, or whose annual gas consumption is less than 10,000 therms, or both
- **Small:** Customers whose annual electric peak demand is between 20 kW and 100 kW, or whose annual gas consumption is between 10,000 therms and 50,000 therms, or both.
- **Hard-to-Reach** - customers who do not have easy access to program information or generally do not participate in energy efficiency programs due to a language, business size, geographic, or lease (split incentive) barrier. These barriers are defined as:
  - Language – Primary language spoken is other than English, and/or
  - Business Size – Less than ten employees and/or classified as Very Small (as defined above), and/or
  - Geographic – Businesses in areas other than the San Francisco Bay Area, San Diego area, Los Angeles Basin or Sacramento, and/or
  - Lease – Investments in improvements to the building benefit the business only during the lease period; landlords benefit longer.

To enroll in the 2006-2008 Energy Fitness Program PG&E customers will be required to:

- Provide a utility bill identifying them as either a less than 100 kW (an electric rate schedule of A-1 or A-6 will also qualify), or whose annual gas consumption is less than 50,000 therms, or both).
- Sign release forms allowing the Energy Fitness Program to have access to utility billing information from PG&E and to permission to install measures on the premises.

## **12. Customer Interface**

The Energy Fitness Program provides multiple chances to interface with the customer.

The first contact would be through the EFP Energy Specialist/Enrollment Coordinator. The EFP uses two methods of enrollment:

(a) One is for potential customers to call in or drop by the office and enroll in person or over the phone. A site visit will then be conducted by an EFP Energy Specialist/Enrollment Coordinator to complete the enrollment process and conduct an Initial Energy Fitness Report.

(b) The other method of enrollment is more direct. An EFP Energy Specialist/Enrollment Coordinator will sign customers up at their place of business during targeted canvassing of business neighborhoods. It is at this juncture of enrollment where the Energy Specialist/Enrollment Coordinator conducts an Initial Energy Fitness Report.

Both methods have worked well in the 2002-2003 & 2004-2005 Programs. Customers may also enroll in the RHA Energy Fitness Program through the program website.

The second contact with the customer will be performed by the EFP Technicians at the time of the direct installation of the program measures. This is also where technical assistance and education will take place.

A third contact with the customer could take place in the form of a quality assurance inspection by the Program Manager / Energy Audit Specialist.

A fourth contact with the customer is the delivery of the Final Energy Fitness Report which notes further recommendations of which the customer may take advantage.

Further contact occurs with on-going Technical Assistance throughout the Program.

### **13. Energy Measures and Program Activities**

13.1 Prescriptive measures. Include the measure details in the cost-effectiveness calculator (no need to duplicate measure list in the narrative).

13.2 kWh Level Data. Include the measure details in the cost-effectiveness calculator (no need to duplicate measure list in the narrative).

#### 13.3 Non-energy Activities

13.3.1 End-use Load (if applicable)  
Not Applicable

13.3.2 Targeted Sector  
Small Nonresidential Hard-to-Reach (less than 100 kW demand)

#### 13.3.3 Activity Description

##### **Initial Site Visit**

Each business will receive an “Initial Energy Fitness Report” (a preliminary energy audit) after enrolling in the program. This activity will identify the number and type of energy efficiency measures to be installed at that business from the list of measures available. It will become the work order for the installation crew and a “receipt” of measures installed. A copy of the Initial Energy Fitness Report will be given to the business upon completion of the walk-through. This report will list the number and type of measures that will be installed by the EFP Technicians and estimate “deemed” savings the installed measures will achieve. The Initial Energy Fitness Report will also serve as a work order for Energy Fitness Team when they install the measures.

An Energy Specialist will conduct a quick walk-through energy audit with the business owner or their representative to determine how many measures to install. This will also be a technical assistance and education activity as the Energy Specialist will provide the business owner with energy savings and information. The Energy Specialist will also carry a sample pack of the lights

that may be installed to determine the most appropriate lamp to install in each location.

### **Energy Audit Site Visit**

The site visit energy audit data is gathered by the Energy Technicians when the lighting retrofit is performed on the business. Data is entered into a Tablet PC and downloaded back at the office. Data gathered includes:

- Building envelope data regarding building type, wall, window and insulation amounts and R-Values with square footage values are recorded.
- Areas of fenestration with sun shaded areas and window film as well as the condition of weather stripping if it exists.
- Additional lighting that is not retrofitted as part of the EFP Program is noted so recommendations can be made to the business owner regarding additional lighting retrofits that are possible with any rebate information that is available.
- HVAC data is gathered regarding type, age and condition of the unit with potential for the coils to be chemically cleaned as part of the program.
- Water heater, evaporative cooler and electric motor information is gathered and a diagram of the business floor plan is drawn with any important information recorded.
- The Energy Technician will also do a walk through energy education with the business owner at this time and provide technical assistance where needed.

### **Final Energy Fitness Report**

A more comprehensive energy audit will be conducted by the EFP Energy Fitness Team to determine if any additional, cost-effective energy conservation or efficiency measures exist. A Final Energy Fitness Report will be generated and provided to each business as a guide to additional energy savings. The estimated savings from the audit will not be used to justify the cost-effectiveness of this Program.

Utility billing history will be analyzed and incorporated into the final Energy Fitness Report as a basis of energy savings potential. The customers billing history may be accessed twice, once immediately after enrollment to get the billing history for the energy audit and report the second, post-installation billing history will be determined by EM&V based on the desired statistical sampling necessary and may not be a complete year if it is requested towards the end of the program.

### **Follow-up Activities**

RHA provides, with every Final Energy Fitness Report, a list of contractors in the service territory who can provide energy related services; information and assistance in applying for rebates including PG&E Express Efficiency Program, as well as any other applicable third-party programs. RHA will also provide

technical assistance and any other pertinent information that will assist the business owner in installing more measures.

13.3.4 Quantitative Activity Goals

Activity	Business Goals
Energy Audits	2,043
Technical Assistance	2,043
Final Energy Fitness Report	2,043
Customer Education	2,043

13.3.5 Assigned Attributes of the Activity

Appropriate end uses for nonresidential customers.

13.4 Subcontractor Activities

RHA does not plan to use Subcontractors for this program.

13.5 Quality Assurance and Evaluation Activities

RHA has a one-year warranty for the lamps and equipment that is installed under this Program. Replacing defective equipment does not save new energy (the savings were already claimed); however, it is important to maintain projected energy savings as businesses often replace the failed lamps with incandescent lamps.

The following components have been instituted for the 2004-2005 Program and will be continued for this program:

1. RHA will provide all participants with its EFP toll-free phone number so that they can contact the RHA EFP at no cost.
2. The Energy Fitness Program will help to assure customer satisfaction by providing the customer with an Installation Survey to be filled out and mailed back to RHA at the time of the direct install, and a Program Survey that will be sent to the customer with the Final Energy Fitness Report. These surveys will help RHA to maintain good customer satisfaction and improve upon the program if needed.
3. Follow-up quality assurance inspections will be performed on 20% of businesses by the EFP Program Manager to ensure that businesses are happy with the lighting that was installed and that the installed measures are still operating.
4. RHA's Program Manager will handle all customer complaints and take immediate corrective action. If the Manager can not speak the language of the complainant, an employee or translator will be used to handle the call and complaint. If

customer complaints cannot be handled over the phone, the Program Manager or representative will personally visit the customer to resolve the problem. All complaints and resolutions will be tracked in the EFP database and made available to PG&E and the CPUC should it be requested. A product failure shall not fall under the complaint category.

### 13.6 Marketing Activities

In the 2004-2005 Program, RHA found that while word-of-mouth and public service announcements were very successful in recruiting participants with very little money, direct, on-site contact and communication with many potential customers was necessary before they would enroll in the Program. Many potential customers needed to know what type of measures were going to be installed and how it would affect their business. A program enrollment coordinator was hired to enroll participants and to provide the up-front technical assistance necessary to “close the deal”.

This site-visit is necessary to educate potential customers on the benefits of energy efficient lighting, especially the compact fluorescent lamps. Samples of the CFLs are demonstrated and often installed for a limited time so that the business owners can determine if they want to have them installed permanently in their business. Occasionally two or three visits by EFP personnel is provided to change the lighting to satisfy the concerns of the customer. Only after the customer is satisfied that the lighting measures work as described are they enrolled in the Program and scheduled for a complete installation.

Technical assistance by the Program Manager is also made available and provided up front to sell the Program to skeptical business owners. The technical assistance addresses any concerns business owners may have with any of the measures including quality, performance, energy savings and warranty considerations.

RHA’s Energy Fitness Program marketing plan includes the following methods of marketing its services and benefits:

#### **Referrals**

The EFP enrollment coordinator follows up on all referrals for enrollment into the program. In the 2002-2003 and 2004-2005 programs this was an effective way to enroll participants and it will be continued in the 2006-2008 Program.

#### **Direct Marketing**

RHA’s EFP Enrollment Coordinator and Program Managers will continue to be involved in visiting businesses and business groups to market the EFP program and enroll businesses. The Enrollment Coordinator will:

- Contact business groups, community economic development agencies, property management agencies, and business associations to arrange times to meet with them or to address their organizations at their group meetings to promote the Energy Fitness Program. Program information will also be provided to these groups to be included in their newsletters and information mailings.

- Obtain mailing lists of businesses in order to send direct market mailings to businesses.
- Canvass business parks, strip malls, and random isolated businesses to enroll participants.

Also, when the Enrollment Coordinator or Program Managers visit a business to enroll them or the Energy Technicians are performing an installation in a particular business, they will market the Program to businesses in the vicinity as time allows.

### **Local Energy Events**

Whenever possible, RHA will meet with local community and business leaders in small towns and communities to explain the Program and attempt to coordinate an Energy Fitness Event to coincide with local events. During the Event, EFP representatives will be “in town” to enroll participants, conduct the initial Energy Fitness Report, and conduct energy audits.

### **Broadcast Media**

RHA may send out periodic public service announcements (PSAs) to local media outlets (newspapers, radio, and TV stations). While this method of marketing is essentially free, it does have some drawbacks, one never knows when or if the PSA will be broadcast.

RHA may also underwrite programs on local community radio stations to have a constant message broadcasted throughout the service territory.

### **Print Media**

RHA has been able to get substantial and timely articles written about the Energy Fitness Program in local newspapers at no cost. This effort will be continued throughout the 2006-08 Program. Before RHA enters a new area information about the program (via a press release) may be provided to local newspapers and business organizations to include in their publications.

### **Marketing Materials**

RHA has relied on marketing materials in the form of postcards mailed to an area prior to the Enrollment Coordinator entering a sector. As a follow-up letters are also mailed to business listings obtained mainly through Chamber of Commerce membership or the telephone book. Once the enrollment Coordinator enters a certain community, he distributes program brochures to the businesses and upon request provides additional information via a program video and PowerPoint presentation. The 2004-2005 Program developed fliers, a DVD video, a PowerPoint presentation, and website; all of which are used to describe the program and to encourage potential participants to enroll. All of these marketing materials will be used and improved upon in the 2006-2008 Program.

### **Toll-Free Phone Access**

The Energy Fitness Program maintains a toll-free phone line to provide assistance, information, address requests, and enroll customers into the program. In addition, to support

multilingual customers, RHA operates a call-center at its office in Fresno that can provide callers with program information in various languages facilitating enrollment into the program.

**PGE2073 Medium Nonresidential Energy Fitness—RHA**

2006 - 2008

1. Projected Budget*	\$4,584,741
2. Projected Net Impacts	
MWh	21,909
MW (Summer Peak)	3.434
Therms	0
3. Cost Effectiveness*	
TRC	2.50
PAC	2.25

\*Does not include PG&E contract administration costs, which are estimated at 5 percent of expected contract value and included at the portfolio level.

**4. Descriptors**

Market Sector: Medium Nonresidential (Commercial, Industrial, Agriculture)  
Classification: Third Party Direct Install  
Status: New

RHA's market experience and outreach efforts conducted as part of our existing Energy Fitness Program have shown there is significant interest by medium size business owners for a direct install program catering to their size business. RHA will fill this need by implementing the 2006-2008 Medium Nonresidential Energy Fitness Program.

The Medium Nonresidential Energy Fitness Program (MNEFP) seeks to provide underserved medium size business customers in the region north of Sacramento with a multi-faceted and cohesive program including: outreach, energy audit, customer education, direct installation of a tailored package of measures, personalized technical assistance and additional program referrals.

As the implementers of a robust package program, Richard Heath and Associates, Inc. (RHA) brings 27 years of energy program expertise, including, most recently, great success in the design of the 2002-2005 Small Nonresidential Energy Fitness Programs (EFPs) for hard-to-reach business customers within the same service area. With support from PG&E, RHA's team expanded these programs from the initial concepts to fully realized programs that have exceeded all of the energy savings goals during their combined three-year existence. The MNEFP, when completed, will result in 24,455,700 gross kWh savings for PG&E's north of Sacramento region.

By utilizing existing program structures, numerous community contacts, and exposure, RHA will expand its current operation to serve the medium nonresidential customer. The program may install comprehensive energy conservation measures (lighting, occupancy sensors, and condenser coil cleaning) at no cost to the targeted PG&E business customers. We will coordinate closely with PG&E Program Administrative Staff in order to provide accurate, efficient, and clear

reporting, while also ensuring that all program milestones are met in a timely manner.

Richard Heath and Associates' (RHA's) Medium Nonresidential Energy Fitness Program (MNEFP) seeks to reduce energy consumption and energy-related costs by identifying energy conservation measures in hard-to-reach medium nonresidential facilities in the area north of Sacramento. The program is intended to provide direct installation of cost-effective energy conservation measures at no cost to Investor-owned utility (IOU) customers in PG&E's service area. The MNEFP will qualify and enroll customers, conduct initial and in-depth energy audits, install cost-effective energy conservation measures, provide technical assistance; including coordinating with other programs, and produce a final Energy Fitness Report for each customer. Those who desire to install additional recommended measures will be assisted in finding qualified contractors, locating financing opportunities, and participation in other third-party and utility-sponsored energy programs.

The 2006-2008 Medium Nonresidential Energy Fitness Program is modeled on the 2002-2003 & 2004-2005 Energy Fitness Programs with minor modifications associated with streamlining the entire program. We will continue to serve the hard to reach businesses in the area north of Sacramento by implementing a similar program for medium nonresidential customers. RHA's current program serves businesses with a peak electrical demand of less than 100 kW; however, in our outreach and marketing efforts over the last three years, RHA has encountered a large demand for this type of program for medium nonresidential facilities. In order to determine the target size for this program, RHA elects to utilize the "Medium Nonresidential" definition provided by the California Public Utilities Commission in Appendix C of its August 2003 "*Energy Efficiency Policy Manual*." The *Manual* deems that Medium Nonresidential customers are those "...whose annual electric demand is between 100 kW and 500kW, or whose annual gas consumption is between 50,000 therms and 250,000 therms, or both."

Not unlike the small and very small hard to reach businesses the EFP currently serves, the medium facilities are also overlooked by many utility sponsored programs. In response to this need, RHA has designed a program that focuses on serving the medium nonresidential customer base. We have created a package of measures that allows the program to install lighting and other comprehensive measures to achieve immediate energy savings at no cost to the customer. By packaging measures together in a direct install program, RHA avoids lost opportunities, thus, maximizing savings for each individual medium facility.

RHA has found that the key approach to achieving rapid market penetration and avoiding lost opportunities are: 1) direct install delivery of a package of measures, and 2) incentives high enough to induce high, fast customer enrollment. A direct install program reduces the number of contacts with facility owners and their tenants; thereby minimizing inconvenience to both parties. Full-cost incentives induce them to enroll in spite of no immediate, direct economic benefits to the owner from tenant business measures. These innovations applied to the hard-to-reach medium nonresidential facilities will overcome longstanding, obdurate barriers to program participation.

Following are the strategies RHA has used in the EFP and will continue to use in the MNEFP to attain program goals:

**Strategy 1: Reduce energy consumption on a permanent basis by:**

- Installing energy saving measures (primarily lighting and other appropriate measures within the average cost allotment per business).
- Conducting a facility energy analysis to identify cost-effective measures that will provide permanent energy savings.
- Assisting participants in getting identified cost-effective measures installed by providing assistance in rebate applications and financing information.

**Strategy 2: Reduce peak electrical demand by:**

- Installing, and recommending to be installed, energy conservation measures that will permanently reduce peak demand (energy-efficient lighting, motors, refrigeration, HVAC systems, etc.).
- Conduct an AC condenser coil cleaning program on nonresidential buildings to address charge and maintenance issues with air conditioning systems.
- Remove energy consuming devices that are not necessary (e.g. delamping unnecessary lighting).

**Strategy 3: Provide cost-effective energy conservation measures by:**

- Installing or recommending to be installed, only cost-effective energy conservation measures that have been identified as part of the Express Efficiency Program, DEER, or other available programs; or if the lifecycle payback meets or exceeds the client's expectations.

**Strategy 4: Address identified market failures and barriers by:**

- Targeting services directly to nonresidential utility customers who need it the most – the medium nonresidential businesses in the area north of Sacramento.
- Providing energy services and consumer information in a way to make it easy for business owners to understand, including multilingual materials.
- Utilizing language-competent multilingual personnel.
- Actually providing and installing measures in nonresidential facilities in addition to producing energy analysis reports. The client won't have to spend time looking for materials or looking for, and/or contracting with, an energy service provider.

**Strategy 5: Address equity considerations by:**

- Targeting nonresidential customers in rural areas north of Sacramento.
- Providing services that nonresidential IOU customers are entitled to through their payment of the Public Purpose Program assessment in their utility bills.
- Assisting participants in accessing other CPUC-funded programs in the area (PG&E's Express Efficiency Program and any and all other appropriate third-party programs).

**Strategy 6: Provide an innovative program to nonresidential IOU customers in California**

The MNEFP is an innovative program that provides services to nonresidential IOU customers in California that:

- Has demonstrated savings and program success during the 2002-2003 and 2004-2005 funding cycles.
- Provides energy conservation measures at no charge for medium nonresidential customers.
- Provides personalized energy services to customers who need it the most.
- Works directly with customers to achieve their energy savings goals.

**Strategy 7: Assist customers in taking advantage of other energy conservation and efficiency programs**

The MNEFP will assist and encourage participants to take advantage of other energy conservation and efficiency programs by:

- Assisting customers in applying for rebates and incentives offered by PG&E, private entities, the State of California, and the federal government by incorporating and supporting them within this program.
- Assisting the State and PG&E in meeting their energy conservation goals and objectives.

**5. Statement**

Direct install services to PG&E customers with a kW demand of 100-500, and/or therm usage of 50,000-250,000 will provide the MNEFP the opportunity to serve those customers in the area north of Sacramento who expressed interest but were ineligible to participate under previous program guidelines. While RHA's Energy Fitness Programs have been successful in reducing energy consumption in almost 2,500 small or very small businesses to date, there remains a large untouched market of potential customers who would benefit from the direct installation of lighting and other comprehensive measures, and the significant energy savings that would result. The primary market barriers to reaching the medium nonresidential facilities with an energy savings program have been identified by the Investor-Owned Utility companies, the CPUC, and RHA include:

**Language Barriers**

The 1997 Economic Census found that just over 25 percent of all businesses were owned by Hispanics, Asians, and Pacific Islanders, the ethnic groups most likely to not speak English as their primary language.

**Geographic Areas**

The target market area is the area north of Sacramento. Within this area, the market area is spatially larger as the number of potential clients is actually smaller. There is a much lower population density in the area as compared to the metropolitan areas and is further reduced by the presence of several municipal utility districts within the zone. Previous programs have concentrated their efforts on highly concentrated urban areas and ignoring this area of northern California.

**Economic Barriers**

Economic barriers also have kept market penetration in the medium nonresidential market very low. Facility owners are understandably reluctant to replace or upgrade functioning equipment in tenanted locations because the economic benefit goes to the tenant. Furthermore, medium

nonresidential facilities, like small and very small business owners, do not have the financial resources to choose energy efficient upgrades even though they would provide savings to their utility bill. A plan to surmount these barriers is provided in the program Rationale section below.

## **6. Rationale**

RHA's proposed 2006-2008 Medium Nonresidential Energy Fitness Program differs from other nonresidential programs in that it targets the medium, hard-to-reach nonresidential sector. Through careful marketing and outreach, RHA will provide direct installation of energy saving measures to these often overlooked facilities, instead of offering rebates or supplying information and hoping businesses take action on their own. The 2002-2003 & 2004-2005 Energy Fitness Programs for small and very-small businesses have enjoyed great success in meeting their energy savings goals, reporting requirements, and high levels of customer satisfaction. RHA will utilize this success in Northern California communities in order to target, market, and provide direct installation of energy conservation measures to the medium nonresidential facilities for proportionally-increased energy savings.

Facility and business owners' primary market barriers of language, geographic area and the unavailability of a economic resources often prohibit the owners from updating fixtures and appliances, even when to do so would result in energy savings. In order to surmount these barriers, RHA has developed the following plan for each of the barriers.

### **Language Barriers**

To address and overcome language barriers, RHA will develop marketing and outreach materials in appropriate languages, utilize ethnic business organizations to promote the program and recruit participants, develop public service announcements in appropriate languages for radio programs in the target market areas, and other means to ensure understanding of the program and its concepts.

### **Geographic Areas**

RHA will utilize its existing contacts within the communities in the underserved area north of Sacramento to outreach those facilities often overlooked by utility sponsored energy savings programs. RHA's headquarters for this project will be located in Chico, California, and will allow greater infiltration into the northern area, while keeping travel time and costs to a minimum.

### **Economic Barriers**

The MNEFP will target those medium nonresidential customers in need by installing a package of cost-effective energy conservation and efficiency measures, already paid for by the public benefits surcharges appended to each business' utility bill. RHA will demonstrate the benefits of the energy fitness process to customers through the installation of energy conservation measures and the identification and analysis of additional cost-effective measures. Customers are

informed via a customized Final Energy Fitness Report of these additional measures and encouraged to implement them for additional energy cost savings.

## **7. Outcomes**

By implementing our package of measures resulting in reduction of energy use, technical assistance, education and Final Energy Fitness Reports, we will have achieved our desired program outcome. The Medium Nonresidential Energy Fitness Program's success will be measured by the enrollment and participation of medium size nonresidential businesses and permanent energy savings associated with the direct install of cost effective energy measures. RHA will measure the success of the MNEFP via quality assurance inspections (both CIP and internal), customer surveys (both at time of installation and when services are complete), and happy customers.

## **8. Strategy**

By definition, a direct install program relieves the potential for lost opportunity via thorough audit of existing, viable, and effective measures. At the time of the outreach, audit, and customer education, businesses are provided every opportunity to ask questions and be involved in the energy conservation process.

RHA will enroll businesses in the Small Nonresidential EFP or the MNEFP based on the needs of the business, the size of the facility, and in order to maximize energy savings and avoid lost opportunities.

To the greatest extent possible, inconvenience to the customer is minimized and the number of visits to the site is few. Within the program structure: enrollment is conducted during area canvassing, by telephone, or on the project website; customer permission is obtained; site audits performed; and installations of measures are completed—all without charge to the customer.

All medium nonresidential IOU customers within the program's service area are eligible if they meet any of the following criteria:

- Their annual electric demand is between 100-500 kW, and/or
- Their annual gas consumption is between 50,000-250,000 therms.

Using a package (CFLs, light fixtures, vending machine controller, occupancy sensor, LED exit sign/retro kits, T12 to T8/5 replacements) of proposed energy savings measures enables the program to install the most comprehensive measures on a per customer basis thereby minimizing lost opportunities to the utmost while serving the widest range of nonresidential facilities (offices, retail, charter schools, mini-markets, churches, medical clinics).

RHA's MNEFP will incorporate as many of the following measures and activities as determined during each individual energy audit to reduce energy consumption and demand:

<b>Energy Conservation Measure Package</b>	
<b>INSTALLED</b>	<b>REMOVED</b>
<b>Screw-in Compact Fluorescent Lamps</b>	
Spiral or A-style CFLs Dimmable CFLs R-40, 30, 20 CFLs PAR-38 & 30 CFLs Decorative CFLs	15 - 150-watt incandescent A-lamps Incandescent lamps on a dimming circuit R-40, 30, 20 incandescent floodlights PAR-38 & 30 incandescent floodlights Decorative incandescent lamps
<b>Fluorescent Fixture Conversion</b>	
27-65 watts Fluorescent Fixture	Incandescent fixture
<b>LED Exit Signs/Retro Kits</b>	
1-watt LED Exit Sign 2-watt LED Retro Kit 1-watt LED Exit Sign	40-watt incandescent 40-watt incandescent 14-watt fluorescent
<b>Fluorescent Conversions</b>	
F32, T-8 lamps and EE ballast F96, T-8 lamps and EE ballast	F40 T-12 lamps with magnetic ballasts F96 T-12 lamps with magnetic ballasts
<b>Delamping</b>	
2-lamp fluorescent fixture 3-lamp fluorescent fixture 4-lamp fluorescent fixture Excessive incandescent lamps	1-lamp fluorescent fixture w/reflector 2-lamp fluorescent fixture 2-lamp fluorescent fixture Lamp Removed
<b>Clean Condenser Coil (450 units)</b>	
Clean condenser coil Check air filters Check refrigerant charge via temperature split	

## 9. Objectives

The primary goal of the Medium Nonresidential Energy Fitness Program is to achieve permanent energy savings through short and long-term energy reduction objectives for hard-to-reach, medium size nonresidential customers. To meet these goals, the MNEFP will utilize the following short and long-term energy reduction objectives. RHA's 2006-2008 MNEFP quantifiable objectives include:

### Energy Savings

- 192,460,837 kWh net lifecycle savings
- 21,909,268 kWh net annual savings
- 27,386,585 kWh gross savings

**Objective 1. Short-term Energy Reduction**

RHA's MNEFP short-term energy reduction objective is to provide energy education and technical assistance activities to reduce energy use by:

- Conducting an initial walk-through energy survey of each business with the business owner. The MNEFP Energy Specialist will show the business owners where the program will upgrade the lighting to benefit the business, demonstrate new lighting technologies that will be employed, and answer technical questions about the equipment, process, and energy savings potentials.
- Conducting an energy audit and providing an Energy Fitness Report describing historic energy use by the business and addressing where and how energy savings can be achieved.
- Providing energy conservation program materials from existing state, federal, and utility programs such as information on Energy Star rated equipment and PG&E's Express Efficiency Program.
- Informing the customer of possible HVAC operations and maintenance (O&M) measures where appropriate such as filter replacement, coil cleaning and duct sealing.

**Objective 2. Long-term Energy Reduction**

RHA's 2006-2008 MNEFP objectives to permanently reduce energy consumption and peak demand include strategies to:

- Reduce energy consumption on a permanent basis
- Reduce peak electrical demand
- Provide cost-effective measures
- Address market failures and barriers
- Address the inequities in energy conservation program delivery methods
- Develop an innovative program
- Take advantage of existing energy programs.

To assure our overall objectives stated above are met, the program will have the following milestones.

<b>Date</b>	<b>Milestone</b>		
March 1, 2006	Begin Pre-Launch Activities		
April 1, 2006	Start site visits, installations, and audits		Gross kWh Savings
July 1, 2006	Y1, 2 <sup>nd</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings Complete 75 condenser coil cleanings	2,140,940 58,125
October 1, 2006	Y1, 3 <sup>rd</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings Complete 150 condenser coil cleanings	4,630,629 116,250
January 1, 2007	Y1, 4 <sup>th</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings	7,120,319
April 1, 2007	Y2, 1 <sup>st</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings	9,610,008
July 1, 2007	Y2, 2 <sup>nd</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings Complete 225 condenser coil cleanings	12,099,698 174,375
October 1, 2007	Y2, 3 <sup>rd</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings Complete 300 condenser coil cleanings	14,589,387 232,500
January 1, 2008	Y2, 4 <sup>th</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings	17,079,077
April 1, 2008	Y3, 1 <sup>st</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings	19,568,766
July 1, 2008	Y3, 2 <sup>nd</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings Complete 375 condenser coil cleanings	22,058,456 290,625
October 1, 2008	Y3, 3 <sup>rd</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings Complete 450 condenser coil cleanings	24,548,145 348,750
December 31, 2008	Y3, 4 <sup>th</sup> Quarter:	Complete ECM installations to meet Gross kWh Savings	27,037,835
			Grand Total
			27,386,585

In addition, all required reports will be submitted on a timely basis.

## **10. Implementation**

RHA's Medium Nonresidential Energy Fitness Program is different from other nonresidential programs in that it provides the direct installation of energy saving measures instead of offering rebates or supplying information and hoping businesses take action on their own. The 2004-2005 Energy Fitness Program is currently in place and RHA proposes to make minor modifications to

streamline the program and utilize more funds for direct installation of energy conservation measures for greater energy savings.

RHA's experience with the hard-to-reach nonresidential market indicates that business owners are interested in reducing their rising energy costs, while property owners are interested in increasing the value of their property and presenting a high quality building to renting business owners. This results in an opportunity for the program to offer services that make it economically attractive for both business and facility owners to reach their goals. RHA has been very successful in the last three years in reaching the small and very small hard-to-reach nonresidential market with a direct install Energy Fitness Program and can utilize the same contacts, marketing strategies and program concepts to achieve significant market penetration of businesses in the areas north of Sacramento for the MNEFP.

The 2006-2008 Medium Nonresidential Energy Fitness Program will utilize existing EFP staffing and add new staffing as appropriate in order to include communities and businesses that have not yet been served. In addition to staffing, RHA's MNEFP will utilize many of the same forms with modifications, process, and procedures that were developed in the prior funding cycles. This will facilitate the transition between programs and allow for an almost instant start-up period. Unknown at this point are changes that may need to be made to the program based on results from the 2004-2005 Small Nonresidential Energy Fitness Program Evaluation, Measurement, and Verification study with feedback from PG&E and the CPUC. These recommendations, if extensive, may alter the implementation of the program as designed in this proposal.

**A. Staffing**

The MNEFP will be staffed with the following positions:

- Program Director
- Program Manager
- Energy Audit Specialist
- Energy Specialist/Enrollment Coordinator
- Energy Technicians
- Project Coordinator/Data Entry Person
- Database Manager

**Program Director (.1)**

The Program Director is responsible for the overall supervision and management of the Medium Nonresidential Energy Fitness Program. This person will be the contact person between PG&E and the CPUC and be responsible for producing the requisite reports.

**Program Manager (1)**

A Program Manager will be used to supervise the two MNEFP Energy Fitness Crews, with each crew composed of two Energy Technicians. The Program Manager will also be available to conduct the in-depth energy audits and will be responsible for producing and delivering the Final Energy Fitness Reports. The Program Manager will be responsible for supervising the Energy Specialist/Enrollment Coordinator.

**Energy Audit Specialist (1)**

The Energy Audit Specialist is responsible for analyzing the data collected by the Program Manager during the in-depth energy audit and producing the Final Energy Fitness Report. In addition to the Program Manager, the Energy Audit Specialist will be responsible for supervising the Energy Specialist/Enrollment Coordinator.

**Energy Specialist/Enrollment Coordinator (1)**

The Energy Specialist/Enrollment Coordinator is responsible for promoting and marketing the MNEFP program and coordinating outreach efforts. The Energy Specialist/Enrollment Coordinator will be responsible for enrolling potential customers on-site, conducting the Initial Energy Fitness Report, providing technical assistance, and conducting customer energy education. During the 2004-2005 Program RHA found that this was an essential position for providing technical assistance and energy education while enrolling participants. The Energy Specialist/Enrollment Coordinator has to be able to quickly show business owners where they can save energy in their business. The Energy Specialist will carry samples of the energy efficient lamps that will be installed to demonstrate in-place. Often this requires the lamps to be left in place for a few days to determine if the business wants that particular type of lighting.

**Energy Technicians (4)**

Each Energy Fitness Crew will be staffed by two Energy Technicians. One Energy Technician will be the lead technician and is responsible for each installation and safety of the crew.

**Project Coordinator & Data Entry Person (1.5)**

Clerical staff will consist of a Project Coordinator and a data entry person. The Project Coordinator will be responsible for scheduling jobs in conjunction with the Program Managers and Energy Specialist, daily Quality Control check of data entry, creation of spreadsheets to better enable reporting, answering phones, compiling client reports and invoicing, assembling and mailing marketing materials, and providing program information to interested customers. The data entry person will be responsible for inputting program data into the program database.

**Database Manager (.5)**

The Database Manager is a part-time position. This person will be responsible for maintaining the MNEFP database and generating necessary reports.

**B. Measures and Activities**

RHA's Medium Nonresidential Energy Fitness Program will incorporate the following measures, activities and process components to reduce energy consumption and demand:

1. Marketing & Outreach (Described in Section 13.6)
  - Marketing efforts
  - Outreach
  - Enrollment

2. Initial Site Visit (Described in Section 13.3.3)
  - Enrollment
  - Initial Energy Fitness Report (preliminary energy audit/work order)
  - Technical Assistance
  - Energy Education
3. Energy Audit Site Visit (Described in Section 13.3.3)
  - Energy analysis (lighting, HVAC system, hot water, process equipment, etc.)
4. Direct Installation of Measures (Described in Section 10.F)
  - Install energy conservation measures (CFLs, T-8s and electronic ballasts, delamping, etc.)
  - Conduct an AC Condenser Coil Cleaning program to service 450 HVAC units on owner-occupied businesses.
  - After-installation, replacement of failed or defective lamps and equipment.
5. Final Energy Fitness Report (Primary Audit Described in Section 13.3.3)
  - Energy Utilization analysis
  - Energy Conservation Measures
  - Operations & Maintenance Measures
  - Payback Analysis of measures
  - Financing options and rebate utilization analysis
  - Energy education
6. Follow-up Activities
  - Quality assurance follow-up. (Described in Section 13.5)
  - Provide technical assistance to customers wanting to do more. (Described in Paragraph 13.3.3)
  - Assist in applying for rebates and implementing work.

**C. Procedures for procurement, delivery, and installation of equipment.**

RHA's 2006-2008 Medium Nonresidential Energy Fitness Program will procure energy conservation products and materials from local vendors as much as possible. Materials are purchased in bulk to reduce costs and to have at least one month's worth of work on-hand. At the end of the 2004-2005 Program, an analysis of installed measures will be conducted to determine the mix of lamps and other measures installed to ensure stock is on hand and readily available to best serve the customer during installation.

MNEFP Crews directly install all materials and equipment. Upon completion of a site visit, the business owner or a representative is asked to verify that the materials were installed by signing a form that states that the materials have been installed and are in working order.

**D. Description of specifications of qualifying equipment (i.e. minimum energy efficiency rating levels).**

All energy efficient materials installed in this program will be:

- Energy Star™ rated when applicable.
- One-year minimum replacement warranty.
- Appropriate for the application.

**E. Description of installation standards.**

RHA has developed a set of commercial lighting installation standards which will be used in this program. These standards are the same ones used in the 2002-2003 and 2004-2005 Programs and are in conformance with current standards used in Statewide EE programs, cover safety issues, address federal, State and local codes, and provide guidelines for correct installation and usage. The installation standards include the 2005 Title 24 Standards & DEER updates.

**F. Direct installation measures:**

***Conversion of Standard 2-lamp, 4-Foot, T-12, Magnetically-ballasted Fluorescent Fixtures with Energy Efficient T-8 or T-5 lamps and Electronic Ballasts***

ECM: Replace existing 34- or 40-watt, T-12 fluorescent lamps and magnetic ballasts with 32-watt, T-8 lamps and electronic ballasts.

***Conversion of Standard 2-lamp, 8-Foot, T-12, Magnetically-ballasted Fluorescent Fixtures with Energy Efficient T-8 lamps and Electronic Ballasts***

ECM: Replace existing 8-foot, T-12 fluorescent lamps and magnetic ballasts with T-8 lamps and electronic ballasts.

***Screw-in Compact Fluorescent Lamps (CFLs)***

ECM: RHA proposes to replace incandescent lamps with CFLs. The wattages of the CFLs installed in this program range from 4 – 42 watts/lamp. The most common lamp to replace is a 75-watt incandescent lamp with 19-watt, electronic-ballasted, integrated CFL.

***Replacement of 200-watt Incandescent Fixture with Compact Fluorescent Fixture***

ECM: Replace 200-watt incandescent fixture with hardwired 65-watt compact fluorescent fixture.

***LED Exit Signs***

ECM: Replace 40 watt incandescent exit signs with a 1-watt, hardwired LED (light emitting diode) Exit sign or 2 watt LED Retro-kit.

ECM: Replace 40 watt incandescent exit signs with a 2-watt, LED (light emitting diode) Retro-kit.

***Delamping***

- ECM: Convert a 4 foot 3-lamp, 2-ballast fixture to a 2-lamp one-ballast fixture. The original fixture wattage is based on T-12, 34- or 40-watt lamps with energy-saving ballast. One lamp and its associated ballast are removed.
- ECM: Convert a 4 foot 4-lamp, 2-ballast fixture to a 2-lamp one-ballast fixture. The original fixture wattage is based on T-12, 34- or 40-watt lamps with energy-saving ballast. Two lamps and its associated ballast are removed.
- ECM: Convert a standard 8 foot 2-lamp, 1-ballast fixture to a 1-lamp one-ballast fixture with a reflector. The original fixture wattage is based on T-12, F96 lamps with energy-saving ballast. One lamp and its associated ballast are removed.

***Optional ECMs (may be added to program in future)***

Additional energy conservation measures that may be available to install if appropriate:

- Photocells
- Occupancy sensors
- Time clocks
- Vending machine controller
- Low flow pre-rinse spray valve
- Refrigeration gasket

These and other additional optional measures will be selected from the Express Efficiency Rebate schedule and DEER, as their cost-effectiveness has already been determined.

### **G. Operations and Maintenance Measures**

Cost-effective Operations and Maintenance (O&M) Measures will be addressed during the initial site visit by RHA Energy Technicians or the business owner/occupant will be instructed on how to do it themselves. O&M measures are often no-cost measures like removing unnecessary incandescent lamps, turning down hot water heater temperature, fixing dripping faucets, adjusting thermostat settings, and other measures which will save energy but do not require a costly level of effort.

Because the potential list of possible O&M measures are great and the potential savings completely variable, they will not be listed or discussed at this point. O&M measures typically have an immediate payback but their effects may not be significant on the customer's utility bills (unless there are a tremendous amount of such measures).

RHA Energy Technicians will note the O&M measures that they discover during the energy analysis of the facility and will record the O&M measures they perform during their site visit in the project database. They will be recognized in the facility's Energy Fitness Report. They will also note the measure to be undertaken by the owner/operator for further follow-up and assistance if needed.

### **H. AC Condenser Coil Cleaning**

This measure will be directed to owner-occupied businesses to indicate the programmatic and delivery effectiveness of this measure on 450 split or packaged HVAC units. Included in this measure are the following components:

1. Clean condenser coils
2. Check air filters
3. Check refrigerant charge via temperature split

## **11. Customer Description**

RHA's MNEFP Program will assist hard-to-reach, medium nonresidential energy users in the north of Sacramento area as defined by the following:

- **Medium:** Customers whose annual electric demand is between 100 kW and 500 kW, or whose annual gas consumption is between 50,000 therms and 250,000 therms, or both.
- **Hard-to-Reach** - customers who do not have easy access to program information or generally do not participate in energy efficiency programs due to a language, business size, geographic, or lease (split incentive) barrier. These barriers are defined as:
  - Language – Primary language spoken is other than English, and/or
  - Business Size – Classified as Medium (as defined above), and/or
  - Geographic – Businesses in areas other than the San Francisco Bay Area, San Diego area, Los Angeles Basin or Sacramento, and/or

- Lease – Investments in improvements to the building benefit the business only during the lease period; landlords benefit longer.

To enroll in the 2006-2008 Medium Nonresidential Energy Fitness Program PG&E customers will be required to:

- Provide a utility bill identifying them as either a 100-500 kW customer or whose annual gas consumption is more than 50,000 therms, or both.
- Sign release forms allowing the Energy Fitness Program to have access to utility billing information from PG&E and permission to install measures on the premises.

## **12. Customer Interface**

The Medium Nonresidential Energy Fitness Program provides multiple chances to interface with the customer.

The first contact is through the MNEFP Energy Specialist/Enrollment Coordinator. The MNEFP uses two methods of enrollment:

(a) One is for potential customers to call in or drop by the office and enroll in person or over the phone. A site visit will then be conducted by an MNEFP Energy Specialist/Enrollment Coordinator to complete the enrollment process and conduct an Initial Energy Fitness Report.

(b) The other method of enrollment is more direct. An MNEFP Energy Specialist/Enrollment Coordinator will sign customers up at their place of business during targeted canvassing of business neighborhoods. It is at this juncture of enrollment where the Energy Specialist/Enrollment Coordinator conducts an Initial Energy Fitness Report.

Both methods have worked well in the preceding Small and Very-Small 2002-2003 & 2004-2005 Programs. A third option will be made available during the 2006-2008 Medium Program for customers who prefer to enroll in the RHA MNEFP through the program website.

Secondary contact with the customer will be performed by the MNEFP Technicians at the time of the direct installation of the program measures. This is also where technical assistance and education will take place.

A third contact with the customer may take place in the form of a quality assurance inspection by the Program Manager / Energy Audit Specialist.

A fourth contact with the customer is through the delivery of the Final Energy Fitness Report that notes further recommendations of which the customer may take advantage.

Further contact occurs with on-going Technical Assistance throughout the program.

## **13. Energy Measures and Program Activities**

13.1 Prescriptive measures. Refer to Sections 10 F through 10 H.

13.2 kWh Level Data.

### 13.3 Non-energy Activities

13.3.1 End-use Load (if applicable)  
Not Applicable

13.3.2 Targeted Sector  
Medium Nonresidential Hard-to-Reach (between 100-500 kW demand)

#### 13.3.3 Activity Description

##### **Initial Site Visit**

Each business will receive an “Initial Energy Fitness Report” (a preliminary energy audit) after enrolling in the program. This activity will identify the number and type of energy efficiency measures to be installed at that business from the list of measures available. It will become the work order for the installation crew and a “receipt” of measures installed. A copy of the Initial Energy Fitness Report will be given to the business upon completion of the walk-through. This report will list the number and type of measures that will be installed by the MNEFP Technicians and estimate “deemed” savings the installed measures will achieve. The Initial Energy Fitness Report will also serve as a work order for Energy Fitness Team when they install the measures.

An Energy Specialist will conduct a quick walk-through energy audit with the business owner or their representative to determine how many measures to install. This will also be a technical assistance and education activity as the Energy Specialist will provide the business owner with energy savings and information. The Energy Specialist will also carry a sample pack of the lights that may be installed to determine the most appropriate lamp to install in each location.

##### **Energy Audit Site Visit**

The site visit energy audit data is gathered by the Energy Technicians when the lighting retrofit is performed on the business. Data is entered into a Tablet PC and downloaded back at the office. Data gathered includes:

- Building envelope data regarding building type, wall, window and insulation amounts and R-Values with square footage values are recorded.
- Areas of fenestration with sun shaded areas and window film as well as the condition of weather stripping if it exists.
- Additional lighting that is not retrofitted as part of the MNEFP Program is noted so recommendations can be made to the business owner regarding additional lighting retrofits that are possible with any rebate information that is available.
- HVAC data is gathered regarding type, age and condition of the unit with potential for the condenser coil to be chemically cleaned as part of the program.

- Water heater, evaporative cooler and electric motor information is gathered and a diagram of the business floor plan is drawn with any important information recorded.
- The Energy Technician will also do a walk through energy education with the business owner at this time and provide technical assistance where needed.

**Final Energy Fitness Report**

A more comprehensive energy audit will be conducted by the MNEFP Energy Fitness Team to determine if any additional, cost-effective energy conservation or efficiency measures exist. A Final Energy Fitness Report will be generated and provided to each business as a guide to additional energy savings. The estimated savings from the audit will not be used to justify the cost-effectiveness of this Program.

Utility billing history will be analyzed and incorporated into the final Energy Fitness Report as a basis of energy savings potential. The customer’s billing history may be accessed twice, once immediately after enrollment to get the billing history for the energy audit and report the second, post-installation billing history may be determined by EM&V based on the desired statistical sampling necessary and may not be a complete year if it is requested towards the end of the program.

**Follow-up Activities**

RHA provides, with every Final Energy Fitness Report, a list of contractors in the service area who can provide energy related services; information and assistance in applying for rebates including PG&E Express Efficiency Program, as well as any other applicable third-party programs. RHA will also provide technical assistance and any other pertinent information that will assist the business owner in installing more measures.

13.3.4 Quantitative Activity Goals

<b>Non-Energy Activity</b>	<b>Business Goals</b>
Energy Audits	One (1) per enrolled business
Technical Assistance	One (1) per enrolled business
Final Energy Fitness Report	One (1) per enrolled business
Customer Education	One (1) per enrolled business

13.3.5 Assigned Attributes of the Activity

Appropriate end uses for nonresidential customers.

13.4 Subcontractor Activities

RHA does not plan to use Subcontractors for this program.

### 13.5 Quality Assurance and Evaluation Activities

RHA has successfully managed utility energy conservation programs for years and is fully aware of providing quick, courteous, and appropriate customer service and complaint resolution. RHA's expertise in QA/QC (Quality Assurance/Quality Control) activities has been utilized in numerous governmental and utility-sponsored energy programs.

RHA has a one-year warranty for the lamps and equipment that is installed under this Program. Replacing defective equipment does not save new energy (the savings were already claimed); however, it is important to maintain projected energy savings as businesses often replace the failed lamps with incandescent lamps.

The following components have been instituted for the 2004-2005 EFP and will be continued for this program:

1. RHA will provide all participants with its MNEFP toll-free phone number so that they can contact the RHA MNEFP at no cost.
2. The Medium Nonresidential Energy Fitness Program will help to assure customer satisfaction by providing the customer with an Installation Survey to be filled out and mailed back to RHA at the time of the direct install, and a Program Survey that will be sent to the customer with the Final Energy Fitness Report. These surveys will help RHA to maintain good customer satisfaction and improve upon the program if needed.
3. Follow-up quality assurance inspections will be performed on 20 percent of businesses by the MNEFP Program Manager to ensure that businesses are happy with the lighting that was installed and that the installed measures are still operating.
4. RHA's Program Manager will handle all customer complaints and take immediate corrective action. If the Manager can not speak the language of the complainant, an employee or translator will be used to handle the call and complaint. If customer complaints cannot be handled over the phone, the Program Manager or representative will personally visit the customer to resolve the problem. All complaints and resolutions will be tracked in the MNEFP database and made available to PG&E and the CPUC should it be requested. A product failure shall not fall under the complaint category.

### 13.6 Marketing Activities

In the 2004-2005 EFP, RHA found that while word-of-mouth and public service announcements were very successful in recruiting participants with very little money, direct, on-site contact and communication with many potential customers was necessary before they would enroll in the program. Many potential customers needed to know what type of measures were going to be installed and how it would affect their business. A program

enrollment coordinator was hired to enroll participants and to provide the up-front technical assistance necessary to “close the deal.”

This site visit is necessary to educate potential customers on the benefits of energy efficient lighting, especially the compact fluorescent lamps. Samples of the CFLs are demonstrated and often installed for a limited time so that the business owners can determine if they want to have them installed permanently in their business. Occasionally two or three visits by EFP personnel is provided to change the lighting to satisfy the concerns of the customer. Only after the customer is satisfied that the lighting measures work as described are they enrolled in the program and scheduled for a complete installation.

Technical assistance by the Program Manager is also made available and provided up front to sell the program to skeptical business owners. The technical assistance addresses any concerns business owners may have with any of the measures including quality, performance, energy savings and warranty considerations.

RHA’s MNEFP marketing plan includes the following methods of marketing its services and benefits:

### **Referrals**

RHA relies on this marketing technique by satisfied customers who are more than happy to refer the program to their business contacts and associates. The MNEFP enrollment coordinator will follow up on all referrals for enrollment into the program. In the 2002-2003 and 2004-2005 EFP this was an effective way to enroll participants and it will be continued in the 2006-2008 MNEFP.

### **Direct Marketing**

RHA’s MNEFP Enrollment Coordinator and Program Manager/Audit Specialist will continue to be involved in visiting businesses and business groups to market the MNEFP program and enroll businesses. The Enrollment Coordinator will:

- Contact business groups, community economic development agencies, property management agencies, and business associations to arrange times to meet with them or to address their organizations at their group meetings to promote the Medium Nonresidential Energy Fitness Program. Program information will also be provided to these groups to be included in their newsletters and information mailings.
- Obtain mailing lists of businesses in order to send direct market mailings to businesses.
- Canvass business parks, strip malls, and random isolated businesses to enroll participants.

Also, when the Enrollment Coordinator or Program Manager visit a business to enroll them or the Energy Technicians are performing an installation in a particular business, they will market the program to businesses in the vicinity as time allows.

### **Local Energy Events**

Whenever possible, RHA will meet with local community and business leaders in small towns and communities to explain the program and attempt to coordinate an Energy Fitness Event to coincide with local events. During the Event, MNEFP representatives will be “in town” to enroll participants, conduct the initial Energy Fitness Report, and conduct energy audits.

### **Broadcast Media**

RHA may send out periodic public service announcements (PSAs) to local media outlets (newspapers, radio, and TV stations). While this method of marketing is essentially free, it does have some drawbacks, one never knows when or if the PSA will be broadcast.

RHA may also underwrite programs on local community radio stations to have a constant message broadcasted throughout the service area.

### **Print Media**

RHA has been able to get substantial and timely articles written about the program’s predecessor, the Energy Fitness Program (for Small and Very-Small businesses) in local newspapers at no cost. This effort will be continued throughout the 2006-08 MNEFP. Before RHA enters a new area, information about the program (via a press release) may be provided to local newspapers and business organizations to include in their publications.

### **Marketing Materials**

RHA has relied on marketing materials in the form of postcards mailed to an area prior to the Enrollment Coordinator entering a sector. As a follow-up, letters are also mailed to business listings obtained mainly through Chamber of Commerce membership or the telephone book. Once the enrollment Coordinator enters a certain community, he distributes program brochures to the businesses and upon request provides additional information via a program video and PowerPoint presentation. The program will update existing: fliers, a DVD video, a PowerPoint presentation, and website; all of which are used to describe the program and to encourage potential participants to enroll. All of these marketing materials will be improved and utilized throughout the 2006-2008 MNEFP.

### **Toll-Free Phone Access**

The MNEFP will maintain a toll-free phone line to provide assistance, information, address requests, and enroll customers into the program. In addition, to support multilingual customers, RHA operates a call-center at its office in Fresno that can provide callers with program information in various languages facilitating enrollment into the program.

## **14. Conclusion**

RHA’s MNEFP will reduce energy consumption and energy-related costs through energy conservation measures in hard-to-reach medium nonresidential facilities in the area north of Sacramento. The program will provide direct installation of cost-effective energy conservation measures, provide technical assistance; including coordinating with other

programs, and produce a final Energy Fitness Report for each customer at no cost to the customer.

RHA has found that the key approach to achieving rapid market penetration and avoiding lost opportunities are: 1) direct install delivery of a package of measures, and 2) incentives high enough to induce high, fast customer enrollment. A direct install program ensures measures are adopted by customer, and offering full-cost incentives induce business/facility owners to enroll. These innovations applied to the hard-to-reach medium nonresidential facilities will overcome resistance to program participation.

RHA has developed this direct install program by leveraging administrative costs with its existing Energy Fitness Program, and has assembled a package of measures catering to the needs of the medium nonresidential customer. The direct result of this tailored package is high energy savings (21,909,268 Total Annual Net kWh), ultimately resulting in increased customer satisfaction and the achievement of energy conservation goals.