

## PUBLIC UTILITIES COMMISSION

SAN FRANCISCO, CA 94102-3298



February 16, 2007

Advice Letter 1997-E

Akbar Jazayeri  
Director of Revenue and Tariffs  
Southern California Edison Company  
P O Box 800  
Rosemead, CA 91770

MAR 01 2007

REVENUE &amp; TARIFFS DEPT.

Subject: Request for Approval of the Palm Desert Partnership Demonstration Project  
Implementation Plan and Request for Authorization to Record Expenditures Incurred  
for the Project During 2006-08 in the Procurement Energy Efficiency Balancing  
Account (PEEBA) and Use Existing Unspent/Uncommitted Energy Efficiency Funds  
for the 2006-08 Project Expenditures

Dear Mr. Jazayeri:

Advice Letter 1997-E is withdrawn per your request as indicated in your letter dated February 6, 2007. A copy of the advice letter is included herewith for your records.

Sincerely,

A handwritten signature in black ink, appearing to read "Sean H. Gallagher".

Sean H. Gallagher, Director  
Energy Division

May 11, 2006

**ADVICE 1997-E  
(U 338-E)**

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA  
ENERGY DIVISION**

**SUBJECT:** Request for Approval of the Palm Desert Partnership Demonstration Project Implementation Plan and Request for Authorization to Record Expenditures Incurred for the Project During 2006-08 in the Procurement Energy Efficiency Balancing Account (PEEBA) and Use Existing Unspent/Uncommitted Energy Efficiency Funds for the 2006-08 Project Expenditures

**PURPOSE**

Southern California Edison Company (SCE) hereby requests approval to implement the City of Palm Desert Partnership Demonstration Project (the Project) as part of SCE's 2006-08 energy efficiency program portfolio, and requests authority to record up to \$18 million in Project expenditures during 2006-08 in SCE's Procurement Energy Efficiency Balancing Account (PEEBA). SCE proposes to use existing unspent/uncommitted Procurement Energy Efficiency funds to fund the 2006-08 Project costs, up to \$18 million. In addition, SCE seeks the California Public Utilities Commission's (Commission) approval to fund thermal energy storage measures as part of the Project.

**BACKGROUND**

The Project is proposed as the next step in the evolutionary development of energy efficiency community partnerships. For its part in this demonstration project, the City of Palm Desert has agreed to commit a higher level of City leadership and resources in support of the promotion and delivery of SCE's programs than energy efficiency community partnership programs would normally provide. In return, SCE will commit to a five-year, sustained campaign in the City of Palm Desert that will tap the City's demand-side management potential through aggressive targeted outreach, marketing, financing, and installation strategies available to all of the City's customers. The Project will emphasize energy saving measures that also target peak demand reductions to maximize the value of measures to customers. The Project seeks to test the efficacy of early equipment replacement strategies, including and especially for central air

conditioning. Over the course of the envisioned five-year implementation period, the Project's objective is to reduce overall energy usage and peak load in the City of Palm Desert by thirty percent (30%).

The Project represents a comprehensive, long-term campaign to fully utilize SCE's currently-authorized portfolio of programs in the City of Palm Desert, and then tap into a greater level of energy savings and demand reduction potential made possible through the incremental partnership activities proposed as part of this advice filing. In this filing, SCE requests authority to incur expenditures associated with the first three years of the Project. SCE plans to submit a request for the final two years of the Project in SCE's 2009-2011 energy efficiency funding application.

In addition to program expenditures funded through SCE's currently-authorized 2006-08 programs, SCE proposes to spend up to an additional \$18 million in funding during the 2006-08 program cycle on the Project's residential and nonresidential demand-side management strategies and measures. The additional \$18 million of funding sought for the Project through this advice filing will be used to implement the Project's strategies and measures which are summarized below and detailed in the Program Implementation Plan (PIP), attached hereto as **Appendix A**.<sup>1</sup>

SCE proposes to use existing unspent/uncommitted energy efficiency funding to fund, including accrued interest, the Project's expenditures for 2006-08. In its initial review, SCE has identified approximately \$24 million in Public Goods Charge funds, Pre-1998 DSM funds and Procurement Energy Efficiency funds previously approved by the Commission for energy efficiency programs and collected from SCE's ratepayers that, as of December 31, 2005, remained unspent and uncommitted. SCE is in the process of confirming existing commitments from prior years, and the estimated \$24 million in unspent/uncommitted funding may change once SCE completes its confirmation of existing commitments.<sup>2</sup> However, existing unspent/uncommitted funds are sufficient to cover the Project's implementation costs during 2006-08. Thus, SCE requests approval to use existing unspent/uncommitted funds to pay for the 2006-08 Project costs, up to \$18 million.

The Project's energy efficiency measures are intended to comprise a substantial part of an overall comprehensive plan for the City, which includes promotion of other existing DSM programs, including energy efficiency and low-income energy efficiency,

---

<sup>1</sup> The PIP sets forth the full five-year implementation plan for the Project.

<sup>2</sup> During the course of this program cycle, SCE expects to identify opportunities to capture additional cost-effective energy savings and peak demand reduction from already-existing programs and/or newly-proposed programs and activities. Consistent with the Commission's rules, as SCE identifies these emerging opportunities it will seek the Commission's approval to use remaining unspent/uncommitted funds from prior years through subsequent advice filings. SCE believes this approach provides the best means to ensure that its portfolio of energy efficiency programs will produce the levels of energy savings and demand reduction necessary to meet the Commission's aggressive energy efficiency goals.

self-generation incentive programs, as well as the California Solar Initiative.<sup>3</sup> To achieve the truly aggressive energy savings and demand reduction objectives that SCE and the City of Palm Desert have set for themselves, SCE proposes to increase existing approved measure incentive levels for some measures deployed in the City of Palm Desert to encourage penetration above and beyond historic participation levels and to support early replacement strategies (including and especially for inefficient air conditioners) that will accelerate and increase the energy savings and demand reductions realized from the Project.

### **NEED FOR THE PROJECT**

Residential electricity usage in the City of Palm Desert is presently 50% higher than that for the average residential SCE customer, and reflects the hot climate and the need for air conditioning. The greatest difference in consumption is in the single-family home and mobile home segments, where the usage in the City of Palm Desert is nearly double the SCE system average. The markedly greater than average electricity usage in the City of Palm Desert's single-family homes may be attributed to the larger than average home sizes, and to the higher air conditioner usage. In the case of mobile homes, the greater usage is almost entirely due to air conditioning. Another key driver of electricity consumption in the City of Palm Desert's residential market is whether the customer resides in the City all year long, or only during the winter season.

In the nonresidential market, the City of Palm Desert has few very large industrial or commercial accounts (12 in total), but many smaller and medium size accounts. Five segments comprise 75% of nonresidential usage: offices, retail, miscellaneous small commercial, hotels, and water agencies.

The City of Palm Desert accounts for 0.8% of SCE's system electricity usage, but less than 0.4% of the customer base. Usage in the City of Palm Desert has increased over time, although usage on a per customer basis is now slightly lower than that in 2000. Average residential summer peak usage in the City of Palm Desert is 267% of off peak usage, far higher than the SCE system average, where residential summer peak is, on average, 147% of off peak residential usage. Nonresidential customers in the City of Palm Desert face similar challenges in keeping their electric usage down during peak periods.

SCE expects the City of Palm Desert's load to continue to grow, as more customers are moving to the eastern portion of SCE's service area (Riverside and San Bernardino

---

<sup>3</sup> Consistent with the comprehensive scope of the Project, SCE is pleased to report that Southern California Gas Company has participated in the planning for the demonstration project and plans to submit its own request for funding for gas energy efficiency measures for the Project.

counties) and into larger homes with more air conditioning needs.<sup>4</sup> The demand for peak electricity will continue to increase, particularly to serve air conditioning load.

The City of Palm Desert's residents have a keen interest in saving energy and reducing their bills. Over the last two years, 15% of the City's residential accounts have participated in SCE's energy efficiency programs and received over \$870,000 in incentives. Heating, ventilation and air conditioning (HVAC) represents the largest single measure installed (over 800 units), and the City residents' participation in HVAC incentive offerings is double the rate of SCE's overall residential customer base. The City of Palm Desert customers have also shown a willingness to make substantial investments to reduce their energy bills.

### **PARTNERSHIP TO IMPLEMENT THE PROJECT**

The Project presents a model for community energy partnerships that brings the City of Palm Desert and its residents and businesses together with their energy utilities, SCE and Southern California Gas Company (SoCalGas), in a partnering relationship in which each partner will bring its experience, expertise and resources to bear on the task of saving energy and reducing demand in the City. Another partner for the Project will be The Energy Coalition, which has extensive experience in assisting utilities and cities in coming together to bring energy efficiency offerings to communities using partnership principles.<sup>5</sup> The planned roles and responsibilities of The Energy Coalition are identified in the PIP, and the estimated budget for The Energy Coalition's services to the Project over the 2006-08 implementation period is not expected to exceed \$1 million.<sup>6</sup>

The City of Palm Desert is an acknowledged leader in wise energy policy and civic commitment. Similarly, SCE is recognized as a national leader in energy efficiency, and offers one of the largest portfolios of DSM programs in the country. The Energy Coalition brings policy expertise and facilitation skills to the Partnership. By joining together in the Project, the City, SCE, SoCalGas and The Energy Coalition will leverage each other's strengths and resources to save energy for the City's residents and businesses for the benefit of all ratepayers.

Under this partnership model, the City's residents and businesses will be empowered to become reliable providers of cost-effective, environmentally-advantaged, DSM energy

---

<sup>4</sup> Some reports indicate that the population in Riverside County is expected to double by 2030. See Southern California Association of Government's 2004 Regional Transportation Plan/Growth Vision: Socio-Economic Forecast Report, at page 43. (<http://scag.ca.gov/forecast/downloads/forecastreport2004.pdf>).

<sup>5</sup> Upon approval of the Project, SCE will work with the other Project partners to enter into an agreement to jointly implement the Project, by which each partner will agree to certain roles and responsibilities for implementing the Project, leveraging on each partner's experience, expertise and resources.

<sup>6</sup> See the PIP at Section 10, pp. 6-7. The roles and responsibilities of The Energy Coalition, as well as the other partners, are subject to change. Thus, the estimated budget for The Energy Coalition's services to the Project may change to reflect any revision to its roles and responsibilities.

resources to help meet the state's growing energy needs. In return, they will reap the economic benefits of their participation in a comprehensive program that helps them save energy and save money.

The City's residents and businesses will continue to have complete access to all the programs currently offered under SCE's and SoCalGas' portfolios. However, under the Project, the partners will deliver these additional, incremental unique program offerings:

- A suite of comprehensive and cost-effective packages of DSM measures and educational and behavioral changes that also incorporate emerging technologies as they become commercially available for HVAC, lighting, refrigeration, and pumping;
- A focused, comprehensive HVAC program that maximizes on-peak energy savings and demand reduction by focusing on early replacement through higher incentives offered through special seasonal "sales" and aggressive promotion of services;
- Closely coordinated local education, training, marketing and outreach (including neighborhood "sweeps" and events) in which the partners work together to educate consumers and co-promote programs;
- Packaging financial incentive bundles that marry cost-effective utility incentive levels with various financing packages to facilitate customers' participation in energy efficiency programs;
- Tying together the City of Palm Desert's new energy codes and mandates that go beyond Title-24 with utility-offered technical assistance and incentives to facilitate compliance.

### **OVERVIEW OF INCREMENTAL PROGRAM ACTIVITIES FOR THE PROJECT**

The Project will take a unified approach, under which all DSM offerings will be integrated to help customers take appropriate actions. The overarching principle is to provide comprehensive solutions to customer segments through targeted marketing, outreach and delivery strategies, with a focus on early replacement of inefficient equipment. Marketing, outreach and delivery strategies are intended to leverage the strengths of each of the partners. The Project will rely on a combination of short- and long-term program solutions over the five-year implementation period to achieve the stated energy savings goals for the City. Through these efforts, over the next five years, SCE expects to achieve 84 GWh of annual, long-term energy savings and nearly 29 MW of demand reduction in the City. During the 2006-08 implementation period, SCE expects to achieve approximately 40.2 GWh of energy savings and 12.3 MW of peak demand reduction in the City.

Residential Activities. There are approximately 31,800 residential dwellings in the City of Palm Desert and nearly all represent at least some level of opportunity for retrofits. Of those, the largest potential may exist in the condominium sector, since it constitutes

over one-half of the market—and 67% were built before 1984, when efficiency building standards were far less rigorous than today. These units were built with single-pane windows, low SEER air conditioning, little or no energy efficient lighting, and may contain refrigerators manufactured before higher energy efficiency models were available. Empirical data suggests that the potential for HVAC replacement in this market may be less than some estimates, because many of these 20+ year old units may have been already replaced or substantially repaired, due to heavy use during the long hot summer months experienced in the City of Palm Desert. Nevertheless, where air conditioners have already been replaced with more energy-efficient units that cannot be cost-effectively replaced, high performance windows, window tinting or awnings (that reduce heat gain) along with lighting and appliance measures, could be of real value to residents living in these older condominiums. However, window replacements should only be considered on a case-by-case basis, for reasons explained in Section 13, Residential Measures and Incentives, in the attached PIP.

Older single family homes and mobile homes are another key market: over 2,600 of the 9,800 single family dwellings in the City were built prior to 1984 and mobile homes typically have oversized air conditioners and poorly installed air ducts. Swimming pool circulation pumps are usually one-speed with horsepower ratings that exceed the size needed with new pump designs. Estimates indicate that upgrading HVAC, pool pumps, windows, insulation, and appliances could achieve 28% in energy savings and 20% in demand reduction. The table below shows the expected savings from the Project in the residential sector over the proposed three-year period.

**RESIDENTIAL PORTFOLIO SUMMARY FOR 2006-08**

End-Use Category		
	GWh	MW
HVAC	5.30	2.7
Refrigeration	0.11	0.00
Water heating	-	-
Lighting	3.44	0.70
Other	0.67	0.60
<b>Total</b>	<b>9.6</b>	<b>4.0</b>

Residential measures and incentives are described in detail in the attached PIP. The energy efficiency energy savings and demand reductions associated with these measures will be applied toward the achievement of the Commission’s adopted energy efficiency goals.

Nonresidential Activities. There are approximately 6,400 industrial and commercial accounts, of which 12 are classified as very large. The largest nonresidential segments are offices, retail, small commercial, hotels, and water agencies. A large component of nonresidential usage is HVAC. An estimated 100 million kWh relates to air conditioning,

accounting for slightly over 25% of the total nonresidential annual usage. This presents a large potential for energy savings through AC replacement, fan variable frequency drives (VFDs) on fan motors, diagnostics and repair, and energy management systems (EMS). These savings could account for over 40% of the total nonresidential savings potential. This opportunity will be addressed by the Comprehensive Packaged Air Conditioner Replacement, Maintenance and Finance component of the Project. The Project will address not only the replacement of inefficient AC units, but will also focus on training HVAC dealers/contractors on quality installation techniques and on proper testing and repair practices.

SCE seeks the Commission’s express approval to fund thermal energy storage (TES) measures and other load management strategies as part of the Project. Although not currently identified as an energy efficiency measure under the Commission’s energy efficiency policy manual, load management strategies such as TES measures can help commercial facilities in the City reduce critical peak load. SCE proposes to offer a \$250 per kW incentive for installing a TES system that provides space cooling during critical peak hours. Small commercial customers can take advantage of an ice storage TES system designed to reduce peak use of packaged units. For larger commercial facilities, chilled water TES systems have the capability of removing large cooling loads off SCE’s grid during periods of high peak demand. SCE expects to achieve significant peak load reduction from TES projects. For more details, please refer to Section 13, Nonresidential Measures and Incentives in the attached PIP.

The table below details the expected savings from the Project in the nonresidential sector over the proposed three-year period.

**NONRESIDENTIAL PORTFOLIO SUMMARY FOR 2006-08**

End-Use Category		
	GWh	MW
HVAC	10.07	4.08
Refrigeration	0.57	0.03
Water heating	-	-
Lighting	15.27	2.66
Other	4.80	1.44
<b>Total</b>	<b>30.7</b>	<b>8.2</b>

Nonresidential measures and incentives are described in detail in the attached PIP. The energy efficiency energy savings and demand reductions associated with these measures will be applied toward the achievement of the Commission’s adopted energy efficiency goals.

## **COST-EFFECTIVENESS OF THE PROJECT**

### **FORECASTED COST EFFECTIVENESS RATIOS FOR 2006-08**

<b>Program</b>	<b>Forecast Ratios</b>
TRC	1.67
PAC	1.99

A detailed cost-effectiveness analysis is provided in the attached PIP.

## **COST RECOVERY PROPOSAL**

As previously described, the Project proposes to fully utilize SCE's currently-authorized portfolio of programs in the City of Palm Desert, and then tap into a greater level of energy savings and demand reduction potential made possible through incremental partnership activities proposed in this filing. To accomplish this, in this filing SCE seeks approval to supplement program expenditures funded through SCE's currently-authorized 2006-08 programs by up to an additional \$18 million for the first three years of the Project during the 2006-08 program cycle. SCE plans to submit a request for the final two years of the Project (up to \$12.3 million) as part of SCE's 2009-2011 energy efficiency funding application.

SCE proposes to use existing unspent/uncommitted energy efficiency funding, including accrued interest, to fund the Project's expenditures for 2006-08. In its initial review, SCE identified approximately \$24 million in Public Goods Charge funds, Pre-1998 DSM funds and Procurement Energy Efficiency funds previously approved by the Commission for energy efficiency programs and collected from SCE's ratepayers that, as of December 31, 2005, remained unspent and uncommitted. SCE is in the process of confirming existing commitments from prior years, and the estimated \$24 million in unspent/uncommitted funding may change once SCE completes this process.<sup>7</sup> However, existing unspent/uncommitted funds are expected to be sufficient to cover the Project's implementation costs during 2006-08. SCE request authority to record up to \$18 million in Project expenditures during 2006-08 in SCE's PEEBA, and use existing PEEBA unspent/uncommitted funds to pay for the 2006-08 Project costs.

---

<sup>7</sup> As stated above, during the course of this program cycle, SCE expects to identify opportunities to capture additional cost-effective energy savings and peak demand reduction from already-existing programs and/or newly-proposed programs and activities. Consistent with the Commission's rules, as SCE identifies these emerging opportunities it will seek the Commission's approval to use remaining unspent/uncommitted funds from prior years through subsequent advice filings. SCE believes this approach provides the best means to ensure that its portfolio of energy efficiency programs will produce the levels of energy savings and demand reduction necessary to meet the Commission's aggressive energy efficiency goals.

## **REQUEST FOR COMMISSION APPROVAL**

SCE respectfully requests that the Commission issue a resolution no later than the Commission Conference of June 29, 2006, that provides for the following:

- (1) SCE is authorized to implement the City of Palm Desert Partnership Demonstration Project as part of its 2006-08 program portfolio consistent with the Program Implementation Plan submitted herewith;
- (2) SCE is authorized to record up to \$18 million in Project expenditures during 2006-08 in SCE's Procurement Energy Efficiency Balancing Account (PEEBA);
- (3) SCE is authorized to use up to \$18 million in existing unspent and uncommitted Procurement Energy Efficiency funds to pay for the Project's implementation costs during 2006-08; and
- (4) SCE is authorized to fund thermal energy storage (TES) measures and other load management strategies as part of the Project.

## **NOTICE**

Anyone wishing to protest this advice filing may do so by letter via U.S. Mail, facsimile, or electronically, any of which must be received no later than 20 days after the date of this advice filing. Protests should be mailed to:

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, California 94102  
E-mail: [jir@cpuc.ca.gov](mailto:jir@cpuc.ca.gov) and [jnj@cpuc.ca.gov](mailto:jnj@cpuc.ca.gov)

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004 (same address above).

In addition, protests and all other correspondence regarding this advice letter should also be sent by letter and transmitted via facsimile or electronically to the attention of:

Akbar Jazayeri  
Vice President of Revenue and Tariffs  
Southern California Edison Company  
2244 Walnut Grove Avenue  
Rosemead, California 91770  
Facsimile: (626) 302-4829  
E-mail: [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com)

Bruce Foster  
Senior Vice President of Regulatory Operations  
c/o Karyn Gansecki  
Southern California Edison Company  
601 Van Ness Avenue, Suite 2040  
San Francisco, California 94102  
Facsimile: (415) 673-1116  
E-mail: [Karyn.Gansecki@sce.com](mailto:Karyn.Gansecki@sce.com)

There are no restrictions on who may file a protest, but the protest shall set forth specifically the grounds upon which it is based and shall be submitted expeditiously.

In accordance with Section III, Paragraph G, of General Order No. 96-A, SCE is serving copies of this advice filing to the interested parties shown on the attached GO 96-A service list and R.01-08-028. Address change requests to the GO 96-A service list should be directed by electronic mail to [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com) or at (626) 302-2930. For changes to all other service lists, please contact the Commission's Process Office at (415) 703-2021 or by electronic mail at [Process\\_Office@cpuc.ca.gov](mailto:Process_Office@cpuc.ca.gov).

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by filing and keeping the advice filing at SCE's corporate headquarters. To view other SCE advice letters filed with the Commission, log on to SCE's web site at <http://www.sce.com/AboutSCE/Regulatory/adviceletters>.

For questions, please contact Don Arambula at (626) 302-8179 or by electronic mail at [don.arambula@sce.com](mailto:don.arambula@sce.com).

**Southern California Edison Company**

Akbar Jazayeri

AJ:da:sq  
Enclosures



# CALIFORNIA PUBLIC UTILITIES COMMISSION

## ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)	
Company name/CPUC Utility No.: Southern California Edison Company (U 338-E)	
Utility type: <input checked="" type="checkbox"/> ELC <input type="checkbox"/> GAS <input type="checkbox"/> PLC <input type="checkbox"/> HEAT <input type="checkbox"/> WATER	Contact Person: James Yee Phone #: (626) 302-2509 E-mail: James.Yee@sce.com
EXPLANATION OF UTILITY TYPE ELC = Electric     GAS = Gas PLC = Pipeline     HEAT = Heat     WATER = Water	(Date Filed/ Received Stamp by CPUC)
Advice Letter (AL) #: <u>1997-E</u>	
Subject of AL: Request for Approval of the Palm Desert Partnership Demonstration Project Implementation Plan and Request for Authorization to Record Expenditures Incurred for the Project During 2006-08 in the Procurement Energy Efficiency Balancing Account (PEEBA) and Use Existing Unspent/Uncommitted Energy Efficiency Funds for the 2006-08 Project Expenditures	
Keywords (choose from CPUC listing): <u>Air Conditioning, Balancing Account, Energy Efficiency, Demand Side Management</u>	
AL filing type: <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Annual <input checked="" type="checkbox"/> One-Time <input type="checkbox"/> Other _____	
If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: _____	
Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: _____	
Summarize differences between the AL and the prior withdrawn or rejected AL <sup>1</sup> : _____	
Resolution Required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Requested effective date: <u>6/29/06</u> No. of tariff sheets: <u>-0-</u>	
Estimated system annual revenue effect (%): _____	
Estimated system average rate effect (%): _____	
When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).	
Tariff schedules affected: <u>None</u>	
Service affected and changes proposed <sup>1</sup> : _____	
Pending advice letters that revise the same tariff sheets: _____	

<sup>1</sup> Discuss in AL if more space is needed.

**Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:**

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Ave.,  
San Francisco, CA 94102  
jjr@cpuc.ca.gov and jnj@cpuc.ca.gov

Akbar Jazayeri  
Vice President, Revenue and Tariffs  
Southern California Edison Company  
2244 Walnut Grove Avenue  
Rosemead, California 91770  
Facsimile: (626) 302-4829  
E-mail: [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com)

Bruce Foster  
Senior Vice President of Regulatory Operations  
c/o Karyn Gansecki  
Southern California Edison Company  
601 Van Ness Avenue, Suite 2040  
San Francisco, California 94102  
Facsimile: (415) 673-1116  
E-mail: [Karyn.Gansecki@sce.com](mailto:Karyn.Gansecki@sce.com)

**APPENDIX A**  
**PROGRAM IMPLEMENTATION PLAN**

# **Palm Desert Partnership Demonstration Project Program Implementation Plan**

Dated: May 4, 2006

# Palm Desert Partnership Demonstration Project

<b>1. Projected 2006-08 Program Budget</b>	<b>\$</b>	<b>18,000,000</b>
<b>2. Projected 2006-08 Program Impacts</b>		
MWh		40,240
MW (Summer Peak)		12.3
<b>3. 2006-08 Program Cost Effectiveness</b>		
TRC		1.67
PAC		1.99

#### 4. Program Descriptors

Market Sector: Cross-Cutting  
Program Classification: Local  
Program Status: New

#### 5. Program Statement

The Palm Desert Partnership Demonstration Project (the “Project”) presents a model for community energy partnerships that brings the City of Palm Desert (the “City”) and its energy utilities, Southern California Edison Company (SCE) and Southern California Gas Company (SoCalGas), together in a partnership in which each of the partners brings its experience, expertise and resources to bear on the task of saving energy. A partner for this demonstration project is The Energy Coalition, which also advises the partners on partnership principles espoused by the Aspen Accord. This partnership between the City, its energy utilities and The Energy Coalition provides the foundation for a long-term energy partnership commitment and a five-year, comprehensive demand-side management campaign.

#### **Partner City**

Palm Desert

#### **Partner Utilities**

Southern California Edison Company

Southern California Gas Company

#### **Other Partner**

The Energy Coalition

California benefits from this powerful partnership model because the City’s residents and businesses are empowered to become reliable providers of cost-effective, environmentally-advantaged, demand-side management (DSM) energy resources that help meet the State’s growing energy needs. In return, the City’s citizens and businesses

reap the economic benefits of their participation in a comprehensive program that helps them save energy and save money.

## **6. Program Rationale**

The City of Palm Desert is already an acknowledged leader in wise energy policy and civic commitment. Similarly, SCE is recognized as a national leader in energy efficiency, and offers one of the largest portfolios of customer programs in the country. The Energy Coalition brings policy expertise and facilitation skills to the Partnership. By joining together in the Project, the City, SCE, SoCalGas and The Energy Coalition will leverage each other's strengths and resources for the benefit of the City's residents and businesses.

The City's residents and businesses will continue to enjoy complete access to all of the programs currently offered under SCE's and SoCalGas' portfolios, including the services offered through the existing 2006-2008 Community Energy Partnership. However, under the Project, the City and the utilities will join together to deliver these additional unique offerings:

- A suite of comprehensive cost-effective packages of DSM measures and behavioral changes that also incorporate emerging technologies as they become commercially available for HVAC, lighting, refrigeration, and pumping;
- A focused, comprehensive HVAC program that maximizes on-peak energy savings and demand reduction by focusing on early replacement through higher incentives offered through special seasonal "sales" and aggressive promotion of services;
- Closely coordinated local education, training, marketing and outreach (including neighborhood "sweeps" and events) in which the utilities and the City work together to educate consumers and co-promote programs;
- Packaging financial incentive bundles that marry cost-effective utility incentive levels with various financing packages arranged by the City and the utilities to make it easier for customers to choose to participate in programs; and
- Tying together the City's new energy codes and mandates with utility-offered technical assistance and incentives to facilitate compliance.

## **7. Program Outcomes**

This Project is envisioned as a five-year, sustained campaign. Over the course of those five years, SCE and its Project partners have set an objective to reduce overall energy usage and peak load in the City by thirty percent (30%). To accomplish this remarkable goal, SCE requests authority to spend up to \$18 million in incremental energy efficiency funding over the 2006-08 program cycle to implement the Project. SCE plans to request funding to implement the Project during 2009-10 in SCE's 2009-2011 energy efficiency funding application.

## **8. Program Strategies**

The Project offers a unified approach where all DSM program offerings work together seamlessly to help customers take actions. The Partnership will rely on a combination of short- and long-term program solutions over a 5-year period in order to achieve the City of Palm Desert's stated energy goals for its community. The overarching principle of the Project is to provide comprehensive approaches to all customer groups through targeted strategies with a focus on early replacement of inefficient equipment. Marketing, outreach and delivery strategies are intended to leverage the strengths of each of the partners.

### **Program Strategy: Promotion and Outreach**

- A multi-faceted approach impacting all residents and businesses
- Energy surveys for all customers
- Continuous, targeted communication and education
- Neighborhood sweeps to sell, finance and install measures
- Demonstration projects showcasing efficiency opportunities within the program
- School curriculum promoting efficiency and demand reduction

### **Program Strategy: Comprehensive HVAC**

- Robust program to encourage early replacement in all markets
- Incentives and financing to replace energy hogs
- Trained, certified contractor/dealer network
- Includes proper installation and air duct repair

### **Program Strategy: Residential Consumers**

- Surveys and sweeps provide specific customer info for ongoing targeted communication
- Sales events, point-of-sale incentives and neighborhood sweeps increase participation and make things easy
- Addresses all areas: behavioral changes, appliances, cooling, lighting, pools
- Addresses all segments: single family, multifamily, condominiums, and mobile homes

### **Program Strategy: Nonresidential Consumers**

- Low-cost/no-cost equipment replacements for small businesses
- Detailed audits, technical assistance and incentives for large businesses
- Segment focused (golf courses, building tune-ups, motel/hotel)

**Program Strategy: Residential and Nonresidential New Construction**

- New regulations mandating high efficiency construction
- Technical and design assistance for developers to meet higher requirements

**9. Program Objectives**

This Project is envisioned as a five-year, sustained campaign.

The tables below summarize preliminary estimates of program costs and energy savings for the electricity component of the Program.

<b>Total Partnership Program Summary</b>			
<b>Measure Category</b>	<b>Energy Savings</b>		<b>Cost (\$M)</b>
	GWh	MW	
Residential Portfolio	9.6	4.0	\$10,089,451
Non Residential Portfolio	30.7	8.2	\$7,910,549
<b>Total</b>	<b>40.2</b>	<b>12.3</b>	<b>\$18,000,000</b>

<b>Residential Portfolio Summary</b>		
<b>Measure Category</b>	<b>Energy Savings</b>	
	GWh	MW
HVAC	5.30	2.7
Refrigeration	0.11	0.00
Water heating	-	-
Lighting	3.44	0.70
Other	0.67	0.60
<b>Total</b>	<b>9.6</b>	<b>4.0</b>

<b>Non-Residential Portfolio Summary</b>		
<b>Measure Category</b>	<b>Energy Savings</b>	
	<b>GWh</b>	<b>MW</b>
HVAC	10.07	4.08
Refrigeration	0.57	0.03
Water heating	-	-
Lighting	15.27	2.66
Other	4.80	1.44
<b>Total</b>	<b>30.7</b>	<b>8.2</b>

### **10. Program Implementation**

SCE’s partnership approach has proven to be an appealing model from a participant standpoint because it bundles services that have been disparate and sporadically utilized by customers. Partnership participants are exposed to “the bigger picture” of local, state and global energy resources, and they are presented with a variety of energy savings opportunities through electric, gas, and water utility programs and sustainable practices. Results are not delivered in isolation. This is facilitated by administrators from both SCE and SoCalGas who are deeply involved in the program and are in routine communication with the The Energy Coalition, as well as the City, serving as a link between the utilities and the City.

The table below highlights the activities involved in implementing the Project, and provides preliminary roles and responsibilities based on each partner’s experience, expertise and resources. The roles and responsibilities of each partner are subject to change. Based on the roles and responsibilities identified for The Energy Coalition, the total budget for The Energy Coalition’s services is not expected to exceed \$1 million over the 2006-08 implementation period.

## Partnership Roles & Responsibilities

Activity	Palm Desert	SCE/SCG	Energy Coalition
<b>Policy &amp; Operations Planning</b>	<ul style="list-style-type: none"> <li>• Team lead on the City of Palm Desert data</li> <li>• Team lead on the City actions</li> <li>• Team lead on program design for the City &amp; non-utility-funded programs, including local codes</li> </ul>	<ul style="list-style-type: none"> <li>• Team lead on tie to resource planning</li> <li>• Team lead on program design for utility-funded programs</li> <li>• Team lead on technical expertise</li> </ul>	<ul style="list-style-type: none"> <li>• Team lead on the development of unified plan that follows Aspen Accord principles and is supported by all partners</li> <li>• Team lead on the planning for energy co-op program</li> <li>• Policy guidance</li> </ul>
<b>Administrative Functions</b>	<ul style="list-style-type: none"> <li>• Team lead on the City reporting to local government</li> </ul>	<ul style="list-style-type: none"> <li>• Track &amp; report results to CPUC</li> <li>• Oversight of budget &amp; expenditures</li> <li>• Oversight of Measurement/Quality Assurance/Audits</li> </ul>	<ul style="list-style-type: none"> <li>• Liaison to Aspen Accord</li> </ul>
<b>Program Operations &amp; Oversight</b>	<ul style="list-style-type: none"> <li>• Team lead on the City &amp; non-utility-funded programs</li> </ul>	<ul style="list-style-type: none"> <li>• Team lead on IOU-funded program operation</li> <li>• Overall project/program management</li> </ul>	
<b>Marketing Functions</b>	<ul style="list-style-type: none"> <li>• Team lead on the City-only marketing materials</li> <li>• Team lead on local media contacts</li> </ul>	<ul style="list-style-type: none"> <li>• Coordination w/ Energy Star/Flex Your Power/Save Energy, Save Money campaigns</li> <li>• Team lead on developing campaign plans and messaging</li> <li>• Team lead on joint marketing efforts and program collateral materials</li> </ul>	<ul style="list-style-type: none"> <li>• Team lead on Energy Coalition newsletter to interested stakeholders</li> <li>• Team lead on Aspen Accord Communication</li> </ul>
<b>Local (Face-to-Face) Community Outreach</b>	<ul style="list-style-type: none"> <li>• Local team lead on coordination of face-to-face community outreach &amp; recruitment</li> </ul>	<ul style="list-style-type: none"> <li>• Community outreach, including provision of “feet-on-the-street” local presence</li> </ul>	<ul style="list-style-type: none"> <li>• Participate in local outreach</li> <li>• Team lead on PEAK program</li> </ul>

## 11. Customer Description

The City of Palm Desert is primarily a residential, commercial and resort community. System-wide residential customers account for 33% of usage, where in the City of Palm Desert this proportion is 44%. The City has a different demographic profile than the Coachella Valley in general of the SCE service territory. The population is predominantly white and highly educated. Average household income is virtually identical to SCE in general, but average income is 13% higher, reflecting double the percentage of residents making \$200,000 or more per year (7% and growing). The City community is a more mature population with a median age of 47 versus 34 for the SCE area.

Residential electricity usage in the City reflects the hot climate and higher usage of air conditioning, and is presently 50% higher than for the typical SCE customer. The greatest difference in consumption is in single-family and mobile homes, both are nearly double the system average, while apartment and condo usage is relatively similar to system average usage.

In the case of markedly greater than system average usage in the City of Palm Desert's single-family homes, the increased usage may partially reflect larger home size than the system average, and is attributable in large part to higher air conditioner usage. In the case of mobile homes, the greater than average usage is almost entirely due to the very warm summer climate and much higher usage of air conditioning. Another obvious – but nevertheless key -- driver of electricity consumption in the City of Palm Desert's residential market is the customer resides in the City year-around or only in the winter season.

Usage in the City of Palm Desert has increased over time, although due to the energy crisis in California and a weaker economy, usage on a per-capita basis is now slightly lower than it was in 2000. The City of Palm Desert accounts for 0.8% of system electricity usage and customers, but less than 0.4% of the customer base. In general, more customers are moving to the eastern portion of the SCE service area (Riverside and San Bernardino counties) into larger homes with more air conditioning. Riverside County is expected to double in population from 2000 to 2030.<sup>1</sup> With one of the fastest growing populations in Riverside County, demand for peak electricity in the City will continue to increase, particularly to serve air conditioning load.

There are 31,800 residential dwellings in the City of Palm Desert and nearly all represent at least some level of opportunity for retrofits. Of those, the largest potential may exist in the condominium sector, since it constitutes over one half of the market—and 67% were built before 1984, when efficiency building standards were far less rigorous. These units

---

<sup>1</sup> Some reports indicate that the population in Riverside County is expected to double by 2030. *See* Southern California Association of Government's 2004 Regional Transportation Plan/Growth Vision: Socio-Economic Forecast Report, at page 43. (<http://scag.ca.gov/forecast/downloads/forecastreport2004.pdf>).

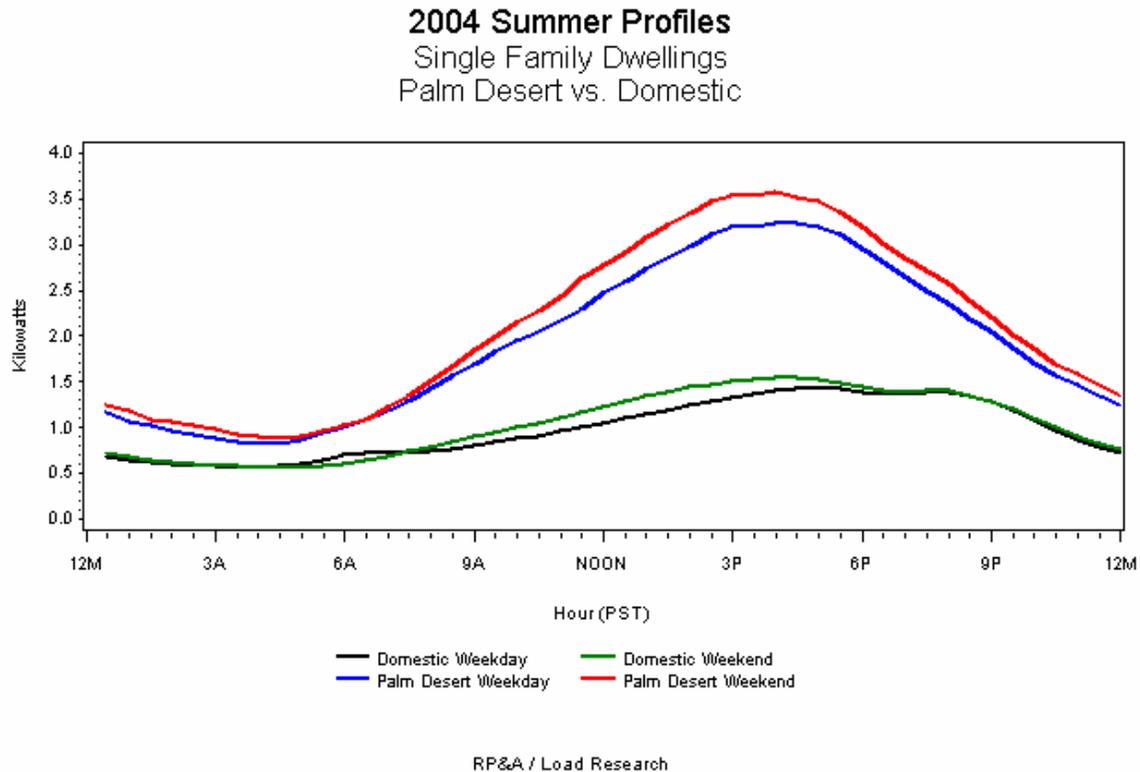
were built with single-pane windows, low SEER air conditioning, little or no energy efficient lighting, and may contain refrigerators manufactured before higher energy efficiency models were available. Empirical data suggests that the potential for HVAC replacement in this market may be less than some estimates, because many of these 20+ year old units may have been already replaced or substantially repaired, due to their heavy use during the long hot summer months experienced in the City of Palm Desert. Where air conditioners have already been replaced with more efficient units that cannot be cost-effectively replaced as part of the Project, high performance windows, window tinting or awnings (that reduce heat gain) along with lighting and appliance measures, could be of real value to residents living in these older condominiums. However, windows should only be considered on a case-by-case basis, for reasons explained in Section 14, Energy Measures and Program Activities.

Older single family homes and mobile homes are another key market: over 2,600 of the 9,800 single family dwellings were built prior to 1984 and mobile homes typically have oversized air conditioners and poorly installed air ducts. Swimming pool circulation pumps are usually one-speed with horsepower ratings that exceed that needed with new pump designs. Estimates indicate that upgrading HVAC, pool pumps windows, insulation and appliances could achieve 28% in energy savings and 20% in demand reduction.

There are few very large industrial or commercial accounts (12 in total) but there are many smaller and medium accounts. The table below shows customers and usage by SCE rate group. Five segments comprise 75% of nonresidential usage: Offices, retail, miscellaneous small commercial, hotels, and water agencies.

<b>Rate Group</b>	<b>Usage (kWh)</b>	<b>No. of Customer Accounts</b>
DOMESTIC	<b>316,354,478</b>	<b>29,977</b>
GS-1	64,016,453	4,723
TC-1	355,508	74
GS-2	181,842,995	1,128
TOU-GS-2	14,269,014	95
	<b>260,483,970</b>	<b>6,020</b>
TOU-8/PRI	44,452,414	4
TOU-8/SEC	16,092,205	8
	<b>60,544,619</b>	<b>12</b>
PA-1	5,078,361	52
PA-2	7,480,826	59
AG-TOU	27,153,658	61
TOU-PA-5	36,930,299	41
	<b>76,643,144</b>	<b>213</b>
ST.LIGHT	<b>2,961,742</b>	<b>305</b>
<b>TOTAL</b>	<b>716,987,953</b>	<b>36,527</b>

Peak electricity demand continues to be a critical issue for Southern California in particular because it is the peak demand that determines the need for resources. Figure I below shows a 24-hour chart of average residential electricity demand per customer for the City of Palm Desert and for the SCE system. Peak usage “spikes” a great deal more than for the system. In the City of Palm Desert, the average residential customer’s summer peak usage is 267% of off peak usage, compared to 147% for the system. For this reason, SCE will emphasize energy saving measures that also target peak demand reductions in order to maximize the value of measures to all customers in general.



*Figure I*

## 12. Customer Interface

Critical to the Project, and a key driver to customers taking actions to reduce energy use and peak demand, is an outreach and information campaign that continually promotes the energy efficiency ethic and contains a follow-up mechanism with residents who have expressed interest in energy efficiency. The Project’s Home Energy Efficiency Survey offering will be promoted through a joint SCE/SCG/City of Palm Desert communication strategy that may include announcements in local media, newsletter articles, direct mail campaigns, etc.

First, a cadre of energy use specialists will be available to complete comprehensive in-home energy surveys, either as part of energy efficiency “events” targeted especially to mobile home parks and condominiums or from customer requests. These surveyors will identify appropriate measures for the home, and discuss incentive and financing options. The surveyors will also install compact fluorescent light bulbs (CFLs) and water/gas-savings measures. Online and mail-in surveys will also be available.

The collected survey information will be input into a database that can be mined for additional communication opportunities, including special “sale” offerings, retailer promotions, and reminders to take advantage of energy efficiency opportunities.

Installation contractors will serve as another primary marketing tool. Using program materials provided by the Project (including a package that outlines the energy savings of various devices, environmental impacts, bill reductions, testimonials, available financing, and utility incentives), these contractors will have the ability to apply incentives at time of sale, making the transaction as streamlined as possible for the consumer. They will also participate in energy events and presentations made to condominium association meetings, at clubhouse events, etc.

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

Among the opportunities that will be available in the residential market to help reach the Project’s goals are:

- **Appliance Recycling**— Offers cash incentives, and free pick-up and disposal of inefficient refrigerators and freezers.
- **Room Air Conditioner Turn-In Events**— Offers cash incentives to turn in inefficient room air conditioners and purchase new ENERGY STAR® qualified models. Turn-in incentive and point of sale instant discounts will be available at the time of purchase at participating home improvement centers.
- **Lighting Exchange/Turn-In Events**— Free replacement of halogen torchiere floor lamps and incandescent plug-in table, desk, non-torchiere floor lamps, and night lights through local outreaches.
- **Hardware Incentives**— Incentives for the purchase of ENERGY STAR® qualified refrigerators or room air conditioners, and qualifying energy-efficient whole house fans, pool pumps and motors, and electric storage water heaters paid as a point-of-sale discount instant discount or rebate.
- **Innovative Pool Pump Technology**— Trains local contractors on how to install new variable-speed pool technology that monitors the pool’s condition and adjusts the pumping system automatically. Potential to be modified with demand response controls.

- **Comprehensive Packaged Air Conditioner Replacement, Maintenance and Finance**— See description under Non-Residential Measures and Incentives, Section 4 B below.
- **Early Replacement HVAC Incentives**— Early replacement of air conditioners and furnaces delivered through the Comprehensive HVAC Program.
- **Window Replacement or Treatment**— Inefficient windows present a special set of issues for the Project. Incentives and financing to either retrofit single pane windows or treat them with window tinting or awnings that reduce heat gain are included in the Project plan as an option. Here’s why: Measurement and evaluation studies have deemed an extraordinarily large percentage of window replacements as consisting of “free-riders.” To address any free ridership issues, we will seek to promote installation of high performance windows that exceed Title 24 requirements.

In addition to high performance windows, the Project will promote measures that reduce heat gains through windows such as trees, awnings, and window film. Window film is a relatively inexpensive measure, applicable to only single pane clear windows, but is not as effective or as long lasting as high performance windows. External shading such as awnings or trees can help reduce heat gains especially through south and west facing windows. In any event, if consumers don’t qualify for utility incentives for window measures.

- **Comprehensive Mobile Home**— Direct installs for mobile home occupants and property managers, including HVAC refrigerant charge and air flow tune-up, duct test and seal, occupancy sensors, interior and exterior CFLs, night lights, interior and exterior hardwire fixtures.
- **Multifamily Rebates**— Cash rebates for property owners or managers of multifamily complexes with two or more units that purchase and install Energy Star® labeled screw-in CFLs, ceiling fans with CFLs, interior and exterior hardwired fluorescent fixtures, refrigerators, exit signs and room air conditioners, and energy efficient electric storage water heaters, pool pumps and motors, high performance dual pane, low-E windows, attic and wall insulation, occupancy sensors, and photocells.
- **New Construction**—Implement utility innovative new construction pilot programs to test and prove concepts

The utilities are implementing many innovative new pilot programs that will form the basis for the next generation of energy efficiency programs. The Project will provide an ideal proving ground for these innovative approaches due to the high level of support for energy efficiency in the community, a supportive local government, close utility-City relationships, and a hot dry climate ideal for testing new air conditioning and building envelope measures.

For example, one program offering will cause builders to construct 50 homes that exceed current Title 24 efficiency standards by 35% through the use of improved HVAC units, computerized evaluation of HVAC performance, improved insulation, high IR-reflectivity roof pigments, and advanced framing techniques. This initiative will show builders how to implement new construction techniques that will enable higher future efficiency standards to be met and at the same time advance the design of future utility new construction programs.

- **Comprehensive Packaged Air Conditioner Replacement, Maintenance and Finance**— A significant opportunity for energy savings and demand reduction lies in the thousands of existing packaged air-cooled air conditioning systems in the City. These units are common in all types of residential and commercial applications. Energy savings can be realized by replacing older equipment, properly installing new equipment, and properly servicing and maintaining existing systems. Information and financial incentives available through SCE’s new Comprehensive Packaged Air Conditioning Systems Program, as well as attractive financing provided by the City, will ensure quick, widespread customer action. This Project offering will:
  - Address all customer segments, and be delivered comprehensively in conjunction with the other programs, services, and promotions that form the Partnership plan.
  - Communicate to residential and commercial customers the financial benefits of replacing older, inefficient systems with state of the art high efficiency systems, and create a call to action to act immediately.
  - Train and certify air conditioning dealers/contractors on state of the art diagnostic, repair and installation techniques including duct leakage testing and sealing, and refrigerant and air flow adjustment, and offer financial incentives for performing energy saving services.
  - Offer a financial incentive to customers that will motivate immediate action, and offset part of the cost, to replace old energy hog air conditioners.
  
- **Comprehensive Commercial Retrofit**— There is ample opportunity to reduce energy consumption in the commercial sector. A portfolio of program strategies will be deployed to systematically and comprehensively address energy savings in each customer segment in the City.

### **1. Small Business Lighting, Refrigeration, and HVAC**

This offering will provide free comprehensive replacement of inefficient lighting systems, and maintenance and repair of refrigeration systems, to small businesses in the City of Palm Desert. The program will conduct an audit of the business and assess the condition of the systems. Lighting will be replaced and certain refrigeration energy efficiency measures will be installed at no cost to the business owner. A condition assessment will determine what additional programs and services could be applicable, and the necessary referrals will be made to ensure follow up services are offered/provided.

## **2. Comprehensive Business Incentives Services**

The Comprehensive Business Incentives Services offering (CBIS) integrates information, design assistance, and financial incentives into one comprehensive offering to help customers adopt energy efficient practices and equipment by addressing informational, financial, performance uncertainty, and transactional cost barriers. As such, the CBIS will offer a multi-strategy approach for key nonresidential customer segments.

### **a. Standard-Offer Financial Incentives**

The CBIS is available to all of the more than 6,400 service accounts identified in the City. The Express Efficiency element will provide customers with opportunities to apply for prescriptive type of incentives and calculated approach with more complex projects utilizing the Standard Performance Contract. Opportunities that will be emphasized include indoor lighting, refrigeration, professional wet cleaning systems, and waste water aeration improvements and controls.

### **b. Energy Audits**

Beginning in 2006, SCE's Business Customer Division will perform business audits as part of the Warm Climate Outreach Effort. This effort may benefit another 500 customers in the City that receive facility audits and other energy efficiency offerings. Remote energy audits will also be available through phone, internet, and mail. These audit activities will be closely coordinated with the Direct Install offering and other Project offerings to minimize and avoid duplication of efforts and conflicts in program offerings.

### **c. "Project Champion" Technical and Implementation Assistance**

For the largest, most promising opportunities developed from energy audits, specialized project technical services, and a "project champion" will be provided. This approach will ensure that whatever barriers that may exist to a customer's implementation of the project will be addressed, and that the project will be driven from inception through to completion.

### **d. LED Traffic Signal Retrofits**

Another targeted effort includes converting the remaining traffic signals in the City to LED. Traffic control tariff with its 74 accounts still have retrofit opportunities although the City participated in the 2001 SCE Traffic Indicator Program, where 700 green and 300 pedestrian LED indicators were replaced to achieve an energy saving of 650,430 kWh and a demand reduction of 125 kW. The Project effort will include converting the red and amber colored traffic signals.

### **e. Agriculture and Golf Course Energy Efficiency**

The Agricultural and Golf Course Energy Efficiency offering is a portfolio of products and services designed to enhance adoption of energy efficient

equipment and practices among agricultural customers. This offering addresses two characteristics of the sector that have historically been a stumbling block to adoption of energy efficiency throughout all regions of the country, and California in particular: diversity of the customer base, and the relatively small role of electricity in their costs.

The program is designed to enhance the energy efficiency of the agriculture sector that include a tests and audits of pumping systems, education and design assistance, financing and incentives, load management, and pilots and feasibility assessments. The agriculture/pumping customers in the City of Palm Desert consist of 213 service accounts with an energy use of 77 million kWh annually. This segment of the market consumes about 10% of the total energy for the City. However, comparing to all business accounts, it is about 20% of the business energy usage.

SCE can provide services to all 213 service accounts to perform pumping assessments and provide incentives to replace the motors to more energy efficient units and also include variable frequency drives and controllers. Other enhancements may be added to target additional energy efficiency measures typically found in pumping operations. The offering will also include a targeted strategy for golf courses ensuring the most energy efficient landscape irrigation options are available to the numerous golf courses in the City.

- **Thermal Energy Storage** — TES is the process of cooling (or freezing) water during off-peak or night-time hours and storing it for use the next day to air condition commercial, industrial, and institutional buildings. TES is a fully-proven technology that, if properly designed, implemented, and commissioned, can improve cooling system efficiency by up to 25% (energy savings), and reduce cooling system related peak electrical demands by 60% to 80% (load reduction) on the hottest summer afternoons, by shifting major air conditioning related electrical loads to the night from the afternoon.
- This offering is designed to help commercial facilities reduce peak load by offering a \$250 per kW incentive for installing a thermal energy storage system that provides space cooling during critical peak hours. Small commercial customers can take advantage of an ice storage TES system designed to reduce peak use of packaged units. For larger commercial facilities, chilled water TES systems have the capability of removing large cooling loads off SCE's grid during periods of high peak demand. SCE expects to achieve significant peak load reduction from TES projects.

### **Measures Information**

Measure information is provided in the corresponding cost-effectiveness calculators and portfolio workbooks.

### **Energy Savings and Demand Reduction Level Data**

Energy savings and demand reduction estimates are provided in corresponding cost-effectiveness calculator and portfolio workbook.

### **Other Activities**

The Project will implement residential On-Line Survey advertising and marketing campaigns to encourage customer participation. The residential On-Line Survey, available on SCE's web site, provides customers with direct access to information on energy and water energy. Customers spend 5-15 minutes to answer specific questions and instantly receive an analysis of energy use in their homes as well as energy-saving recommendations. On-Line Surveys are available in English, Spanish, Chinese and Vietnamese.

In-Home Energy Surveys provide customers, who may not respond to On-Line surveys, with a more personalized, face-to-face energy survey option. After responding to the energy survey solicitation cards to schedule an in-home survey, a specially trained energy auditor inspects the home and provides the customer with immediate answers to basic questions as well as specific recommendations on how customers can save energy and water. The energy auditor installs CFLs in the home and provides valuable energy-saving information. In-home surveys are conducted in English, Spanish, and Chinese.

For large and medium nonresidential customers, facility surveys and audits will be conducted by SCE or third party program implementer staff to make the customer aware of opportunities that may exist to implement energy efficiency projects. These surveys and audits can be initiated through a customer or vendor request to SCE, through SCE's account management staff, or third party program staff. Detailed information will be recorded in a tracking system, including equipment inventories and project recommendations. Recommendations will be followed up periodically to determine implementation status and whether additional assistance will be required to cause a project to be implemented.

For smaller customers, onsite audits may be conducted, or information may be provided through direct mail, email, telephone or other means through the Education, Training and Outreach program. Detailed information will be recorded in a tracking system, including equipment inventories and project recommendations. Recommendations will be followed up periodically to determine implementation status, and whether additional assistance will be required to cause a project to be implemented. If a project resulting from a survey or audit is implemented without design or financial assistance, energy savings will be logged into the tracking system, and claimed toward program goals.

### **Subcontractor Activities**

Third parties will be utilized extensively to perform application reviews, on-site inspections, and measurement and energy savings verification activities. For the onsite audit service, SCE's Business Solutions Group will perform audits for the unassigned (i.e. small) customers, and the Business Customer Division will perform audits for the

assigned (i.e. large) customers. Depending on the size and complexity of the facility the audit is either performed by an account representative or field engineer. The automated audit tool, a pocket PC, portable printer and audit software, are provided by a third-party.

### **Quality Assurance and Evaluation Activities**

Quality assurance activities will include ride-alongs with the installation contractors and unannounced on-site visits during scheduled installation activity. Post-installation on-site visits will verify that contractor recorded measures have been installed. Program staff will survey customers post-participation for satisfaction ratings and measures installation verification.

### **Expected Number/Percent of Inspections**

It is anticipated that approximately 3% of all participating customers or customer sites will receive quality assurance and inspection efforts.

### **Marketing Activities**

Critical to this Project, and a key driver to making customers take actions to reduce energy use and peak demand, is an outreach and information campaign that continually promotes the efficiency ethic and contains a follow-up mechanism with residents who have expressed interest in efficiency. The survey service will be promoted through a joint SCE/SCG/Palm Desert communication strategy that may include announcements in local media, newsletter articles, direct mail campaigns, etc.

First, a cadre of energy use specialists will be available to complete comprehensive in-home energy surveys, either as part of energy efficiency “events” targeted especially to mobile home parks and condominiums or from customer requests. These surveyors will identify appropriate measures for the home, and discuss incentive and financing options. The surveyors will also install compact fluorescent light bulbs (CFLs) and water/gas-savings measures. Online and mail-in surveys will also be available.

The collected survey information will be input into a database that can be mined for additional communication opportunities, including special “sale” offerings, retailer promotions, and reminders to take advantage of energy efficiency opportunities.

Installation contractors will serve as another primary marketing tool. Using program materials provided by the Project (including a package that outlines the energy savings of various devices, environmental impacts, bill reductions, testimonials, available financing, and utility incentives), these contractors will have the ability to apply incentives at time of sale, making the transaction as streamlined as possible for the consumer. They will also participate in energy events and presentations made to condominium association meetings, at clubhouse events, etc.

Also included in outreach activities is assistance to City staff, residences, builders and developers in promoting standards that ensure that all new construction and retrofit projects incorporate the most energy efficient designs and measures possible.

**PROGRAM IMPLEMENTATION PLAN**

**WORKBOOK**

**The workbook will be available on SCE.com at the following address by  
Monday, May 15: [www.sce.com/AboutSCE/Regulatory/eefilings/](http://www.sce.com/AboutSCE/Regulatory/eefilings/)**