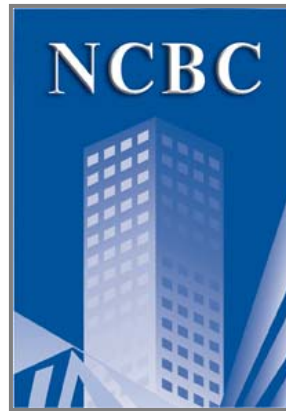

SCE RCx Program Update



May 3, 2007

Steven M. Long, P.E.

Program Overview

- **Objective:**
 - Technical and financial resources to support retrocommissioning (RCx) projects
- **Target Markets:**
 - Large commercial, lodging and hospitality, medical facilities, high technology, grocery, retail
- **Building Goals for Programs:**
 - RCx 200-250 buildings (or approx. 32 million SF) by end of 2008
- **Program Implementation**
 - PECl – Program Management
 - AEC Engineering - Technical support and review of deliverables
 - RealWinWin - Marketing/Recruitment

Program Goals

- 39,040,000 kWh net savings (48,800,000 kWh gross)
- 7,304 kW peak demand savings
- 220,512 Therm savings

- 30% Grocery stores (~120 projects)
- 70% Other (~110 projects)

What makes a good Program candidate?

- **PGC**: Must be an SCE customer paying the California Public Goods Charge
- **Size**: >100,000 square feet of conditioned space (>25,000 square feet for grocery stores)
- **Energy Use**: >15 kWh/SF (>40 kWh/SF for grocery)
- **Controls**: Direct digital control (DDC) system in place
- **Condition of equipment**: Not in need of replacement or significant retrofit
- **Commitment**: Committed ownership, management, and building operators, available funding

What does the Program offer?

- Free building **SCREENING** to determine eligibility for the Program
- Customized **INVESTIGATION** of building operations
- **IMPLEMENTATION INCENTIVES** for energy saving improvements that pay back in > 1 year
- Free **DOCUMENTATION AND TRAINING** on implemented RCx measures
- Free pre- and post-project **ENERGY STAR®** Performance Rating
- Project support services from start to finish

Incentive Summary- Non Grocery

Project Phase	Incentive	Paid to
RCx Investigation	Up to \$0.10/SF	RCx Provider
Implementation	<p>Custom incentive estimated at \$0.05/SF</p> <p>(incentive is calculated based on kWh savings and payback)</p> <p>\$0.005/kWh Bonus for implementation in less than 3 months</p>	Customer
Follow-up Documentation & Training	<p>\$3,000 - \$7,500</p> <p>(based on building size)</p>	RCx Provider

Incentive Summary - Grocery

Project Phase	Incentive	Paid to
RCx Investigation	\$5,000	RCx Provider
Implementation	\$0.14 per kWh, less cost of investigation (capped at 50% of measure cost)	Customer
Follow-up Documentation & Training	Up to \$2,000	RCx Provider

Owner copay of \$1,250 required (\$750 if project is finished within 3 months)

Who provides the services?

- The Program has a pool of pre-qualified retrocommissioning providers (RCx Providers)
 - Approximately 40 firms (>100 individuals)
 - Selected based on their previous RCx experience and expertise in identifying O&M-type energy savings opportunities
- RCx Providers conduct the in-depth investigation, work with owners to select cost-effective measures for implementation, and provide project documentation and training
- For implementation, the owner may:
 - Utilize in-house building staff
 - Hire the RCx Provider to implement or provide technical assistance
 - Contract with outside service contractors
 - Any combination of the above

What are the customer responsibilities?

- Sign the Owner Program Agreement (OPA)
 - Commit to implementing measures with a one year or less payback
 - A cap is set at project start for the maximum required customer financial responsibility for implementing measures that pay back in one year or less
 - If measures are not implemented as agreed, the owner must reimburse the Program for the investigation costs
- Have funding available to implement measures within 12 months of project start
- Commit at least 40 hours of senior building operations staff time to support the project
- Hire and oversee contractors to implement selected measures

QC and Project Verification

- **Prior to Implementation**

- RCx Provider must collect baseline trend data for each measure, using data loggers or EMS
- Program reviews baseline data, energy savings calculations, and implementation costs prior to customer selecting measures

- **After Implementation**

- RCx Provider collects data to verify installation
- Program reviews verification data and updated energy savings calculations after implementation
- Program inspection for every site
- Utility selects some sites for additional inspection

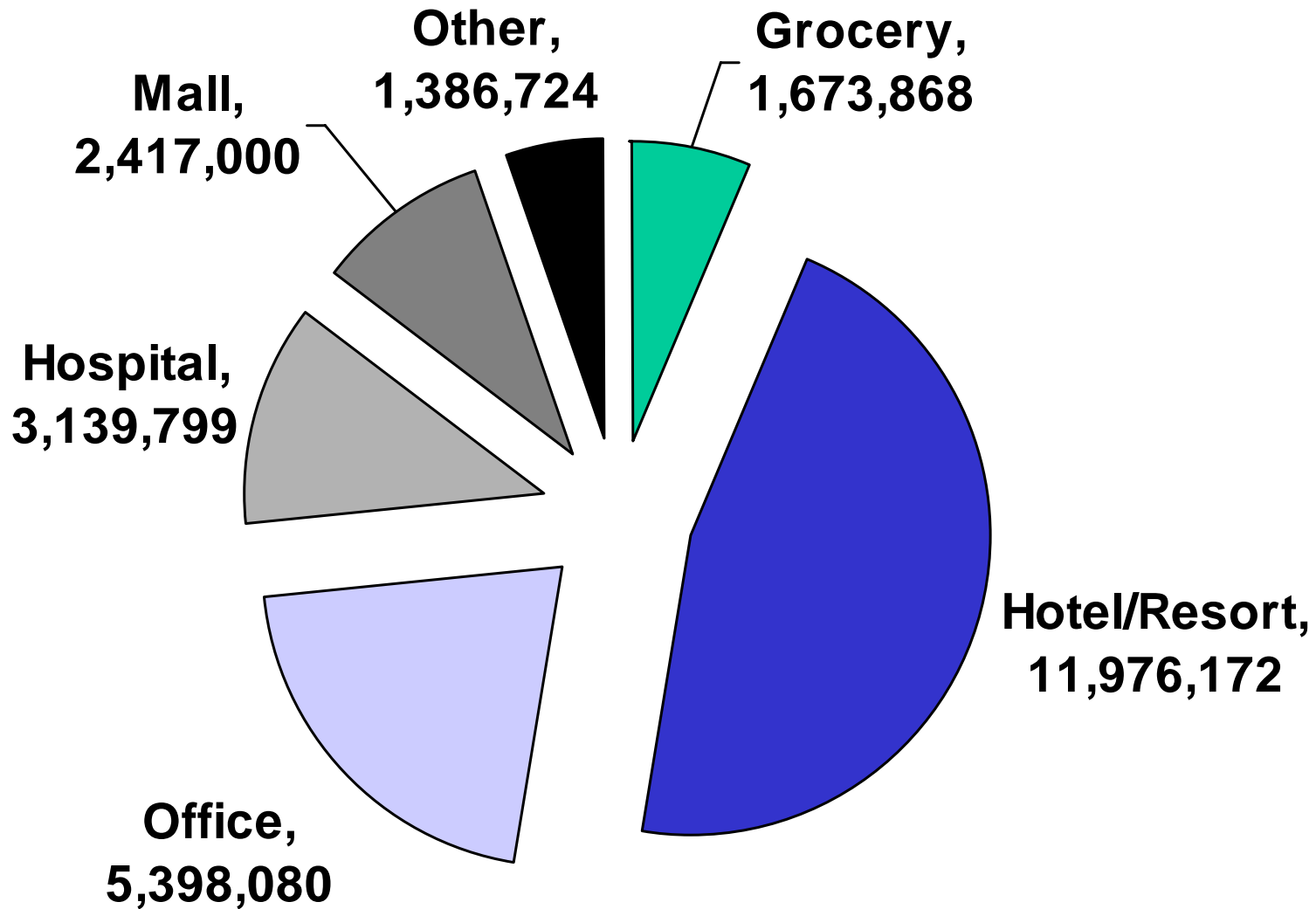
Program Status, May 2007

(Program start date June 2006)

Status	Net Square Feet	Anticipated Net kWh	% kWh Goal
Applications Received	22,132,409 SF 113 applications (23 rejected)	24,287,238 kWh	62%
Signed Agreements	5,771,442 SF 41 agreements	7,774,668 kWh	20%
Installed	1,100,000 SF 1 project	873,505 kWh*	2%

*Further measures are currently being implemented for this project

Applications by Sector (sq ft)



Building Characteristics

Sector	#	Avg SF	Avg EUI (kWh/SF/yr)
Hotel	28	427,720	17
Office	21	257,051	18
Hospital	4	784,950	37
Mall	3	805,667	15
Other	7	198,103	34
Overall	63	385,996	21
Grocery	50	33,477	41

Successes

- Applications exceeding goal
- High level of recruitment through SCE account managers
- Good penetration in hotel and grocery sectors
- Comprehensive toolkit developed for RCx Providers
- Approximately 40 qualified RCx Provider firms
- First five project investigations have resulted in proposed kWh/SF which exceed Program target of 1.275 kWh/SF

Challenges

- Much time is needed to educate the market and build trust among owners in order to obtain Owner Program Agreements
- Difficulty in accommodating buildings which have retrofits planned
- Constraints when dealing with smaller buildings or buildings with highly complex systems
- Grocery and “Fast Track” projects have been delayed in starting, and are taking longer to complete.

12-Month Outlook

- **Marketing**

- Industry workshop
- Case studies, white paper

- **Recruiting**

- RealWinWin to recruit 10.3 million sq ft, targeting large commercial real estate firms with multiple buildings
- Capitalize on links through SCE account managers and RCx Providers
- Fully subscribe Program by year-end 2007

- **Implementation**

- Focus on proper implementation of all measures
- Ensure implementation is adequately verified
- Work closely with RCx Providers to deliver consistent, high level service to customers



A  Sempra Energy utility®



San Diego RCx Program Update

May 3, 2007

NCBC

Jeff Alexander

SDG&E Pilot Program Results



- 2004-2006 pilot program
- 4 buildings, 2.9 million square feet
- Nearly 30 applications received

	Goal	Actual Achievement
kWh	6,200,000	9,888,836
kW	780	1,554

Pilot Program Success: San Diego Marriott Hotel & Marina



Building Size: 1.4 million sq.ft.

Savings: 8.4% reduction in total energy use in Phase 1.
Additional 10.6% possible in phase 2.

- Reduced chiller runtime (increased % in potential savings identified for future implementation).

Simple Payback: less than 1 year

Additional Benefits:

- Chilled water capacity improvements
- Reduced chiller runtime (increased equipment life)
- Documented operation and maintenance procedures
- Hands-on training for O&M staff

2006-2008 Program Background



- **Launch date:** July 2006
- **Target Markets:** Large commercial office, hospitality, medical facilities, high technology
- **Program Goals:**

Square Feet	10,000,000 Sq ft
kWh	12,191,040 kWh
kW	2,496 kW
Therms	183,169 therms

Program Status, May 2007



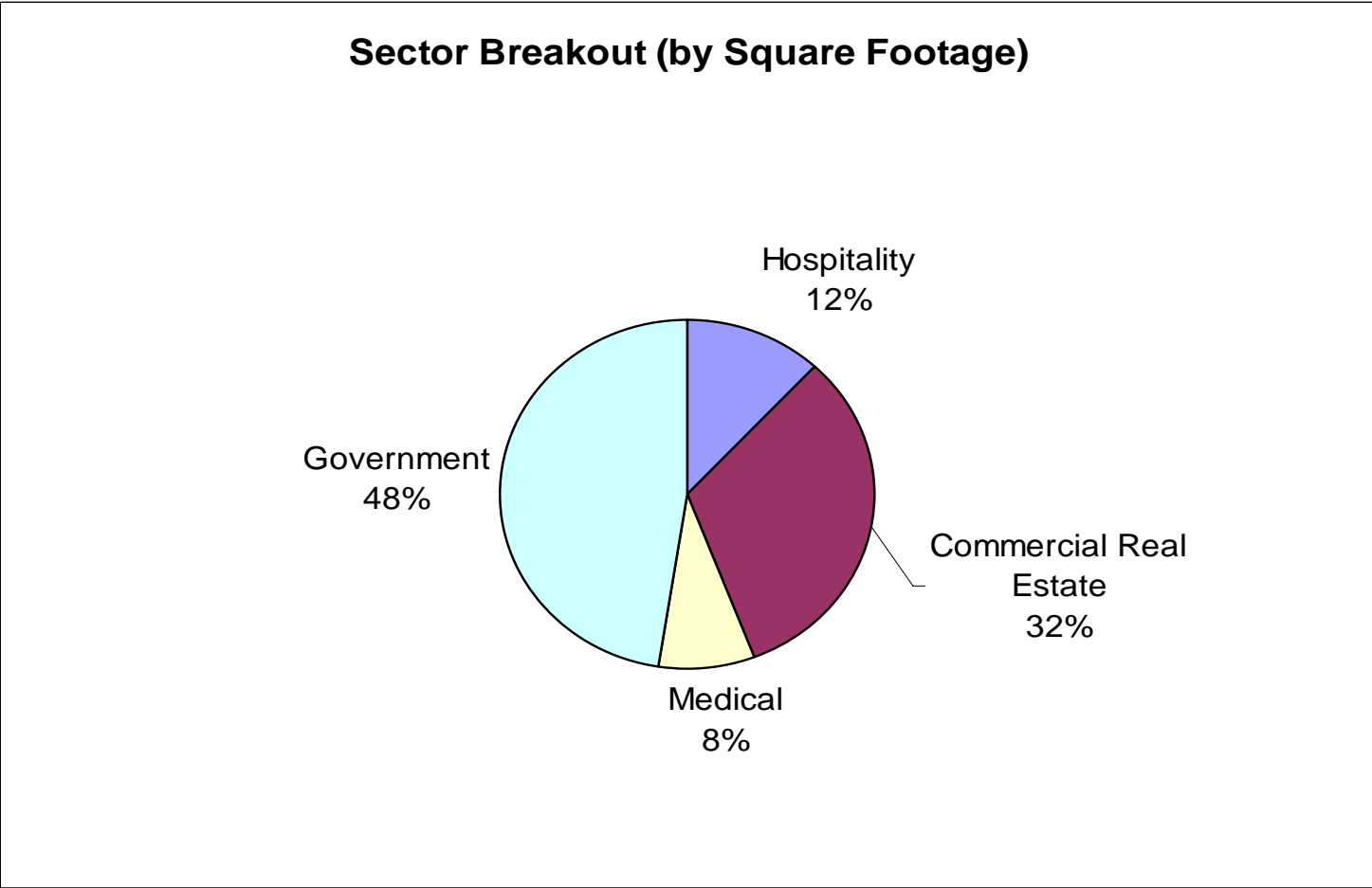
Status	Square Feet	Anticipated Net kWh
Applications Received	8,457,400	10,783,000
Signed Agreements	610,000	746,640
Installed	0	0



Building Characteristics



Average Building Size: 341,189



Successes/Challenges To-date



Successes:

- Coordination with RCx providers for marketing opportunities
- Strong relationships with public buildings
- Applications currently exceeding goal

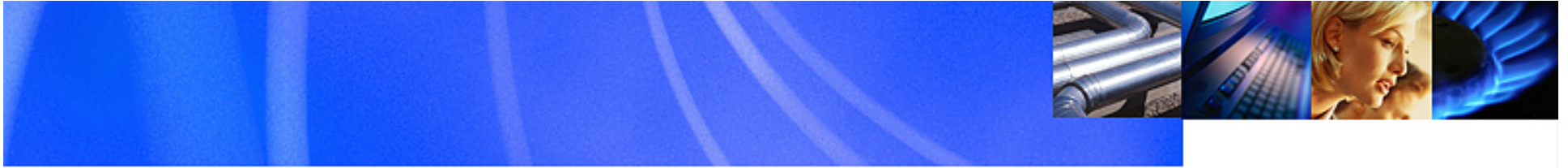
Challenges

- Educating owners on benefits and cost-effectiveness of RCx
- Focusing time and attention of facility managers on RCx

Outlook for 2007-2008



- **Marketing:**
 - BOMA Seminar
 - SDG&E RCx course
 - Increased coordination with Account Executives
 - Outreach coordination with RCx providers
- **Recruitment/Implementation**
 - Fill project pipeline by end of 2007
 - Ensure successful RCx investigations & implementation



Thank You!

Questions? We're happy to answer!