

SCE RCx Program

Southern California Edison Retrocommissioning Program



Commercial & Institutional Buildings 2006-2008

Improving Building Performance through Retrocommissioning

Retrocommissioning (RCx) defined

- » A systematic process for improving building performance by identifying and implementing low-cost operational and maintenance improvements without the need for complex, expensive retrofits
- » Process focuses on the **operation** of mechanical equipment, lighting, and related controls and is intended to optimize how equipment operates as an integrated system
- » Excludes retrofit items such as installing high efficiency lamps, chiller replacements, and air conditioning subsystem replacements

Typical problems identified

- » Simultaneous heating and cooling
- » Lighting and HVAC running when not required
- » Controls needing to be retuned
- » Critical control sensors out of calibration
- » Energy management systems that are not taking full advantage of their capabilities
- » Economizers not operating properly

What can you expect from RCx?

- » Identify and fix O&M problems
- » Increased equipment reliability
- » Involvement of building operators to increase understanding of systems
- » Increased net operating income

Retrocommissioning projects can produce savings of 5-20% of total building energy costs, with a simple payback averaging less than 2 years

What makes a good building candidate?

- » Greater than 100,000 square feet of conditioned space
- » High energy use
- » Mechanical equipment in relatively good condition
- » A Direct Digital Control (DDC) System in place
- » Committed ownership, management, and building operators

What does the SCE RCx Program offer?

- » Free building screening to determine eligibility for the Program
- » Customized investigation of building operations
 - Custom incentive estimated at \$0.10 per square foot up to \$80,000 (paid directly to provider)
- » Implementation assistance for energy saving improvements
 - Custom incentive estimated at \$0.05 per square foot, applies to measures with a simple payback of longer than one year (paid directly to owner)
- » Free documentation and training on improvements
- » Free ENERGY STAR® Benchmark

What are the owner responsibilities?

- » Sign the Owner Program Agreement (OPA)
 - Commit to implementing measures with a one year or less payback
 - A cap will be set at project start for the maximum 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 all investigation costs associated with the project
- » Have funding available to implement measures within 12 months of project start
- » Commit at least 40-60 hours of senior building operations staff time to support the project
- » Hire and oversee contractors to provide implementation of selected measures

What is the program process?

- » A building participating in the SCE RCx Program will typically take 9-12 months to complete
- » The Program operates in six distinct phases:
 - Project Start
 - Screening
 - Agreement Development
 - Investigation
 - Implementation
 - Follow-Up
- » Each phase has key deliverables and milestones identified by the Program to help to ensure successful execution

Who provides the services?

- » The Program has a pool of pre-qualified and trained retrocommissioning providers (RCx Providers) that work directly with you
- » RCx Providers were selected based on their expertise in identifying O&M-type energy savings opportunities and previous retro-commissioning experience
- » RCx Providers will conduct the in-depth investigation, work with you 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, or any combination of the above

Contact Information

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