



Lessons Learned from the San Diego Retrocommissioning Program

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Program Roles

Utility	SDG&E
Program management	Portland Energy Conservation, Inc. (PECI)
QC of project deliverables & performance tracking	Architectural Energy Corporation (AEC)
RCx services	Pool of commissioning providers
EM&V	Itron, Inc.



Program Description

- SDG&E commercial customers with buildings >250,000 square feet
- Funded by electric public goods charges administered by the CPUC
- \$1.1 million budget



Program Goals

- Retrocommission 3,120,000 square feet of building area
- 6,224,400 kWh in annual energy savings and 780 kW of peak demand reduction
 - Emphasis on electric savings and peak demand
 - Gas savings are added value for building owners, but not a goal of the program
- 13.3% electric savings per building



Program Goals, continued

- Ensure a well-delivered, energy-focused RCx process for the owner
- Improve the ability of building operations staff to identify wasteful energy use
- Ensure savings persist over the expected lifetime of the implemented measures



Program Process and Incentives

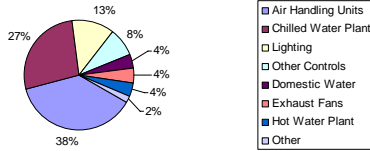
Phase	Incentive	
Candidate Screening	N/A	conducted by program
Building Scoping	\$2,500	paid to CxP
RCx Investigation	Up to \$0.10/SF	paid to owner
Implementation	Up to \$0.05/SF	paid to owner
Follow-up/Persistence		
Documentation/Training	\$5,000	paid to owner
Performance Tracking	Up to \$0.07/SF	conducted by program



Program Results To-date

- 5 large projects, or 3,259,680 gross SF
- In varying stages of implementation

RCx Measures from San Diego Buildings



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Program Results To-date, continued

- Projected savings
 - 8 million kWh (128% of goal)
 - 1,437 kW (176% of goal)
 - 422,000 therms
- Average across projects = 10.2% electric savings and 12.5% gas savings



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Lessons Learned



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Lessons Learned: Filling the pipeline

- Recruiting Owners: (1) Reliance on a provider network versus direct program recruiting (2) Navigating the decision-making processes that many large commercial property managers face
- Scoping Phase: Definition of scope and needed outcome



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Lessons Learned: Getting results

- Coordination: Between program, commissioning providers, and owners
- Program Timeframe: Allowing multiple phases of implementation



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Lessons Learned: Ensuring quality

- RCx Protocols: Value of streamlining the RCx process
- Persistence: Requirements ensure follow-up documentation, training, and monitoring occurs



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What's ahead?

- Diverse marketing channels and new partnerships
- Screening → Investigation (no scoping)
- Enhanced on-the-ground program role to move projects
- Updated protocols and tools
- Multiple implementation phases, plus new incentive for commissioning provider oversight through implementation



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For More Information

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