PG&E 2013-14 Core RCx Program Overview

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PG&E RCx Programs

Customer Care – Customer Energy Solutions

Core Products & Programs

Channel Engagement

Third Party Programs (3P)

Government Program (GP)

Multiple RCx Programs

MBCx Program for UC/CSU

Common Policies & Procedures

Core RCx
PG&E 2013-14 Core RCx Overview

Program Highlights

- Requirements
  - Eligibility – Facilities over 50,000 ft² and with 1M kWh or 50,000 therms usage
  - Incentives – $0.09/kWh, $1/therm and $100/kW on-peak. Total incentive capped at 50% of project cost
  - Customer – commit to installing measures with less than 1 year simple payback up to $25,000

- Good candidates for RCx
  - High EUI, Partial to Full DDC controls, Central Plant, Motivated Customer

Roles

- Customer Application & Screening
- On-site Scoping
- Detailed Investigation
- Installation
- M&V and Post-processing

PG&E and Partners

Customers with limited PG&E support

PG&E and Partners
Measure Eligibility

• Most applicable to Lighting, HVAC & Process load control systems

• Four Traditional RCx buckets:
  • Repair
  • Reset
  • Recode
  • Repair with recode

• Capital and cost intensive projects should not be allowed – RCx is low-cost, quick payback

• Refer to PG&E policies and procedures guide for list of allowable measures
<table>
<thead>
<tr>
<th>Priority</th>
<th>Opportunity</th>
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<tbody>
<tr>
<td>Process</td>
<td>Simplification through streamlining and process standardization</td>
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<tr>
<td>Cost Effectiveness</td>
<td>Cost controls and metric tracking</td>
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<tr>
<td>Customer engagement</td>
<td>Improved communication plan, increased interaction between providers and customer’s contractors</td>
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<td>Energy savings</td>
<td>Improve persistence through program design changes</td>
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Process modification #1 for 2013-14

Old process

Scoping Audits

Measure Identification

Pre-screening

New process

Joint scoping

Targeted Measure Identification

Measure Installation

Savings Verification & Training

Incentive Payment

Advantages:
- Reduces budget modification requests
- Reduces investigation cycle time
- Allows for better cost benchmarking
Process modification #2 for 2013-14

Advantages:
- Reduce variability of ex-post to ex-ante savings ratio
- Drive deeper savings

Old process
- Savings Verification
- Training

New process
- Measure Commissioning / Training
- Savings Verification

Advantages:
- Reduce variability of ex-post to ex-ante savings ratio
- Drive deeper savings
Analytics enabled RCx

- Software analytic tools can disaggregate whole building smart meter interval data into discrete end-uses like lighting, HVAC and ventilation
- This in addition to analysis of weather normalized load data allows for remote identification of operational energy efficiency opportunities

Analytics enabled RCx – scalable and cost effective for small, medium facilities
A demonstration targeting several dozen commercial buildings for a comprehensive, performance-based approach to unlock **15%+ post-installation energy savings** estimated using interval meter data.

**Project Schedule**

<table>
<thead>
<tr>
<th>Quarter (Q)</th>
<th>Description</th>
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<tbody>
<tr>
<td>Q1</td>
<td>Customer Research and Program Design</td>
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<tr>
<td>Q2</td>
<td>Operations Planning and Implementer Engagement</td>
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<tr>
<td>Q3</td>
<td>Contracting and Demonstration Launch</td>
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**PG&E Commercial Program Offerings for Existing Buildings**

- Custom Retrofit
- Retro-Commissioning
- Whole Building

Possible target segments include: Office, Retail, Government, and Grocery.